The Australian Museum Library
Its Formation, Function and Scientific Contribution, 1836–1917

Matthew Sean Stephens
BA (Lib&InfoSc) CSturt

A thesis in fulfilment of the requirements for the degree of
Doctor of Philosophy

The University of New South Wales
School of Humanities
Faculty of Arts and Social Sciences

March 2013
This thesis examines how the Australian Museum Library both reflected and affected scientific activity and debate at the Australian Museum, Sydney, and beyond, between 1836 and 1917. The relationship between those practising science in the metropolis and those on the periphery, such as in colonial New South Wales, has long been discussed but the role of natural history museum libraries in Australia is little mentioned. Similarly, the ways in which museum library activity signalled the shift of influence, in the nineteenth century, from the gentleman scientist to the university-trained professional are not well known and will be explored.

This is a study of the history of books and their readers and consists of a combination of narrative chapters, biographical and bibliographical case studies, and statistical analyses. Case studies include the physical identification of the dispersed libraries of naturalists Ludwig Leichhardt and William Swainson, as well as a study of the influence of the Australian Museum Library on the scientific activity of Australian Museum Curator, Gerard Krefft. At the methodological core of this thesis is a database constructed from records in the Library’s 1883 catalogue; this is combined with information from the Museum’s archives and the physical evidence of the books themselves to reveal the evolution of a collection—including variations in the source, age, country of publication and subject categories of the books acquired—over a period of five decades.

The gentleman naturalists who first managed the Australian Museum, under the direction of the family of Alexander Macleay, dominated Museum activity for almost forty years. The Library was initially a reflection of the interests of this elite group but was gradually transformed by the scientific aspirations of Governor William Denison, the Museum’s greater accountability to the New South Wales government, the influence of Sydney University scientists and the research needs of the Museum’s employees. Despite the Museum’s reluctance to employ university-trained scientific staff even into the twentieth century, by the early 1900s the Australian Museum Library had adopted the most modern system of classification and international bibliographical subscription and index services available to support the work of its researchers.

Declaration relating to disposition of project thesis/dissertation

I hereby grant to the University of New South Wales or its agents the right to archive and to make available my thesis or dissertation in whole or in part in the University libraries in all forms of media, now or hereafter known, subject to the provisions of the Copyright Act 1968. I retain all property rights, such as patent rights. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation (this is applicable to doctoral theses only).

I also authorise University Microfilms to use the 350 word abstract of my thesis in Dissertation Abstracts International.

Signature

Witness

Date

The University recognises that there may be exceptional circumstances requiring restrictions on copying or conditions on use. Requests for restriction for a period of up to 2 years must be made in writing. Requests for a longer period of restriction may be considered in exceptional circumstances and require the approval of the Dean of Graduate Research.

FOR OFFICE USE ONLY

Date of completion of requirements for Award:

THIS SHEET IS TO BE GLUED TO THE INSIDE FRONT COVER OF THE THESIS
COPYRIGHT STATEMENT

'I hereby grant the University of New South Wales or its agents the right to archive and to make available my thesis or dissertation in whole or part in the University libraries in all forms of media, now or hereafter known, subject to the provisions of the Copyright Act 1968. I retain all proprietary rights, such as patent rights. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

I also authorise University Microfilms to use the 350 word abstract of my thesis in Dissertation Abstract International (this is applicable to doctoral theses only).

I have either used no substantial portions of copyright material in my thesis or I have obtained permission to use copyright material; where permission has not been granted I have applied/will apply for a partial restriction of the digital copy of my thesis or dissertation.'

Signed .................................................................

Date 1/10/13 .................................................................

AUTHENTICITY STATEMENT

'I certify that the Library deposit digital copy is a direct equivalent of the final officially approved version of my thesis. No emendation of content has occurred and if there are any minor variations in formatting, they are the result of the conversion to digital format.'

Signed .................................................................

Date 1/10/13 .................................................................
Abstract

This thesis examines how the Australian Museum Library both reflected and affected scientific activity and debate at the Australian Museum, Sydney, and beyond, between 1836 and 1917. The relationship between those practising science in the metropolis and those on the periphery, such as in colonial New South Wales, has long been discussed but the role of natural history museum libraries in Australia is little mentioned. Similarly, the ways in which museum library activity signalled the shift of influence, in the nineteenth century, from the gentleman scientist to the university-trained professional are not well known and will be explored.

This is a study of the history of books and their readers and consists of a combination of narrative chapters, biographical and bibliographical case studies, and statistical analyses. Case studies include the physical identification of the dispersed libraries of naturalists Ludwig Leichhardt and William Swainson, as well as a study of the influence of the Australian Museum Library on the scientific activity of Australian Museum Curator, Gerard Krefft. At the methodological core of this thesis is a database constructed from records in the Library’s 1883 catalogue; this is combined with information from the Museum’s archives and the physical evidence of the books themselves to reveal the evolution of a collection—including variations in the source, age, country of publication and subject categories of the books acquired—over a period of five decades.

The gentleman naturalists who first managed the Australian Museum, under the direction of the family of Alexander Macleay, dominated Museum activity for almost forty years. The Library was initially a reflection of the interests of this elite group but was gradually transformed by the scientific aspirations of Governor William Denison, the Museum’s greater accountability to the New South Wales government, the influence of Sydney University scientists and the research needs of the Museum’s employees. Despite the Museum’s reluctance to employ university-trained scientific staff even into the twentieth century, by the early 1900s the Australian Museum Library had adopted the most modern system of classification and international bibliographical subscription and index services available to support the work of its researchers.
Originality Statement

'I hereby declare that this submission is my own work and to the best of my knowledge it contains no materials previously published or written by another person, or substantial proportions of material which have been accepted for the award of any other degree or diploma at UNSW or any other educational institution, except where due acknowledgement is made in the thesis. Any contribution made to the research by others, with whom I have worked at UNSW or elsewhere, is explicitly acknowledged in the thesis. I also declare that the intellectual content of this thesis is the product of my own work, except to the extent that assistance from others in the project’s design and conception or in style, presentation and linguistic expression is acknowledged.'

Signed .................................................................

Date ..........................

10/13
Acknowledgements

Part of the research process of this thesis included a wonderful seven months ‘lost’ in the rare book collections of the Australian Museum Research Library (AMRL) in 2007. It was a tough and grubby assignment as I searched the many thousands of volumes for the Museum’s earliest book collections. I would like to thank my supervisor, Professor Martyn Lyons, for guiding me out of these thousands of books and suggesting strategies by which I could take control and integrate them into a larger thematic history. I would also like to thank my co-supervisor, Dr Peter Orlovich, for being so enthusiastic about this project and supportive.

Accessing the collections of the AMRL could not have been done alone and I would particularly like to thank the former manager of the Library, Leoné Lemmer. Her passion for rare book material knows no bounds and is closely matched by her love of natural history. She would often send me an email when she found yet another Swainson volume that had been unearthed in one of the Museum’s sectional libraries or the office of a scientist. Similarly, I’d like to thank Frances Smith for tirelessly answering my enquiries, and Fiona Simpson and Anina Hainsworth for helping me over all these years. I would like to thank the staff in the Australian Museum Archives (AMA) for their many years of assistance: Vanessa Finney, Rose Docker and Patricia Egan. The former manager of the AMA, Jan Brazier, helped me to make the most of the Museum’s archives in the early years of this project and has continued to show interest since her move to the Macleay Museum, Sydney University. Dr Jude Philp at the Macleay Museum has also been very supportive of my interest in the Macleays and their relationship to the Australian Museum. At Museum Victoria I would like to thank Leonie Cash, Library Manager, Saribel Minero, Records & Archives Officer, and Dr Tom Darragh, Emeritus Curator, for their advice and assistance in making the most of an extraordinary library and its archive.

I have been assisted by many of the staff at the State Library of New South Wales. In particular, I would like to acknowledge the help of the late Arthur Easton and Mark Hildebrand for their guidance in the Mitchell Library. This thesis was
inspired by the need to better recognise the importance of some of Australia's older book collections and the Mitchell Library continues to fuel my desire to keep chipping away. Former Mitchell Librarian and Emeritus Curator, Elizabeth Ellis, has been an extraordinary mentor to a generation of librarians, archivists and curators and I am very grateful to her for her interest and advice in my work on heritage book collections and actually getting me to put my money where my mouth is. Her successor, Richard Neville, has continued the good fight and led discussions among librarians and archivists in Sydney who are managing these types of collections.

I would like to thank Gerard Krefft's biographer, Jenny Nancarrow, for casting her eye over my Krefft chapter and offering advice and to Dr Diana K. Jones for her research in Surrey relating to Alexander Macleay's neighbour at Rooks Nest. I also thank Christine Miller for her eagle eye in the initial conversion of the Australian Museum’s 1883 library catalogue into an electronic format.

The custodian of Alexander Macleay’s home at Elizabeth Bay, the Historic Houses Trust of New South Wales (HHT), enabled me to take leave from my position as reference librarian to spend time on this thesis. Staff at the HHT were of great assistance and Joy Hughes, former HHT historian, first directed me to her research on the Macleay family and the books once at Elizabeth Bay House. Former curator of Elizabeth Bay House, Scott Hill, and his staff facilitated access to copies of this research. At the HHT’s library, the Caroline Simpson Library & Research Collection, I would like to thank the Head, Megan Martin, for arranging leave to enable me to physically work on the AMRL’s collections and who is as interested and excited as I am about the history of books and in considering the ways in which we can manage these collections for the future.

I would like to thank my mother Dr Sylvia Martin for her tireless read through of a draft of this thesis and her many useful comments. Finally, I would like to thank my partner, Dr James Renwick, for his editing skills, magical touch with word processing software and wonderful patience and support over the many years it has taken me to complete this thesis.
# Table of Contents

Abstract .................................................................................................................................... iii  
Originality Statement ........................................................................................................... v  
Acknowledgements ............................................................................................................. vii  
Table of Contents ................................................................................................................... ix  
List of Tables .......................................................................................................................... xv  
List of Figures ..................................................................................................................... xvii  
Publications and Presentations ..................................................................................... xix  
Abbreviations ....................................................................................................................... xxi  

Introduction ............................................................................................................................. 1  
  The Aims of this Thesis......................................................................................................... 3  
  Approaches to the History of Libraries ............................................................................... 5  
  Access to Scientific Literature in Australia Prior to Federation ....................................... 13  
  The Sources .......................................................................................................................... 24  
  Methodological Approach and Organisation of Chapters ................................................. 26  

Chapter One: Origins of the Australian Museum Library: Local Naturalists, Their Social Networks and Their Books, 1796–1848 ............................................................. 31  
  The Museum’s First Association of Scientific Gentlemen ................................................. 32  
  The Australian Museum Circle, 1836–1848 ..................................................................... 41  
    A Sydney Branch of the Linnean Society? ....................................................................... 46  
  The Alexander Macleay Library .......................................................................................... 54  
  The AM Circle’s Access to Scientific Literature in the 1830s and 1840s....................... 61  
    The Use of Scientific Literature for the AM’s First Catalogue ........................................ 70  
  Conclusion ............................................................................................................................ 75  

Chapter Two: The Founding of the Australian Museum Library and its Early Development, 1849–1883 .............................................................................................. 77
The Significance of the Swainson Library .................................................................184

The Libraries of Two Early Australasian Naturalists ...............................................186

Chapter Four: Educating Gerard Krefft: Reading, Researching and Writing

and the Australian Museum Library, 1860–1874 .........................................................187

The Use of Books by Museum Scientific Staff, 1850–1874 ........................................189

The Early Naturalist Education of Gerard Krefft .......................................................192

Krefft's appointment to the Australian Museum .......................................................199

Krefft's publications between 1860 and 1869 ..........................................................204

The Maturing of Krefft’s Work and Reputation, 1869–1874 .........................................209

The Queensland Lungfish, 1870 ....................................................................................210

Krefft's Australian Entozoa Study, 1871 ....................................................................216

The Thylacoleo carnifex: Gerard Krefft vs Richard Owen, 1865–73 ..........................223

Representations of the Thylacoleo carnifex in the AML ...........................................227

Conclusion ....................................................................................................................232

Chapter Five: Reading the Library: The AML’s Transition from a ‘Private’
to Institutional Library, 1858–1883 ........................................................................235

Infrastructure and Libraries: Evidence at the AML, 1836–1883 ...........................238

The Library Space .......................................................................................................238

The Australian Museum Library: Both a ‘House’ and ‘Institutional’ Library............245

The Australian Museum: A Gentleman's Regency Villa ..........................................246

A ‘House’ Library ....................................................................................................254

The Trustees .............................................................................................................254

The Officers of the Museum .....................................................................................259

An Institutional Government Library .......................................................................263

Tradition and Change in Society Libraries ................................................................264

AML Funding compared to other institutions .........................................................269

The AML Catalogue, 1883 .......................................................................................274
List of Tables

Table 1. Key AM Committee Members and Associates, 1836–48 .................................44
Table 2. Number of Titles Versus Number of Volumes Transferred—by Four Sources .................................................................137
Table 3. Inventory: Number of Books Located in Sections 2, 3 & 4 ..............................139
Table 4. Total Leichhardt Books Located (Sections 2 & 3, Appendix F, Part 2) ..........140
Table 5. Number of Titles by Subject Area by Language .............................................144
Table 6. AML Swainson Books Located (out of 227 vols originally acquired) ........168
Table 7. Spending on Books as a Percentage of Total Budget by the Australian Museum and Three Other Institutions, 1824–1883 .................................272
Table 8. Key Library Accessions Acquired 1854–59 and Catalogued in 1883 ..........301
Table 9. Subject Areas Represented in 1883 ..............................................................322
Table 10. Collection Accessions: Periodised Comparison, 1836–1883 .....................511
Table 11. Collection Accessions: Cumulative Growth, 1836–1883 ..........................514
Table 12. Collection Accessions by Subject: Periodised Comparison, 1836–1883. .................................................................517
Table 13. Collection Accessions by Subject: Cumulative Growth, 1836–1883 ......518
Table 14. First Endowment: Periodised Comparison, 1854–1863 ..........................519
Table 15. First Endowment by Subject: Periodised Comparison, 1854–1863 ......521
List of Figures

Figure 1. Two ‘Gentlemen of Science’. .............................................................................................38
Figure 2. Alexander Macleay. ...........................................................................................................47
Figure 3. The signatures of both father and son on a copy of Wolff’s *Icones Cimicum* (1800). .................................................................................................................................59
Figure 4. Macleay subject areas later collected by the AML by no. of titles. .........................61
Figure 5. Sources of Early Personal Scientific Libraries in Sydney. ......................................64
Figure 6. From the Metropolis to the Periphery: An Example of George Bennett’s use of Vigors & Horsfield. ........................................................................................................73
Figure 7. The first library stamp, purchased 1859. ........................................................................94
Figure 8. ‘List of Books, the Property of the Late Dr. Leichhardt, in the Museum Library.’ .................................................................................................................................135
Figure 9. Example of ‘Leichhardt binding’ ....................................................................................142
Figure 10. Map of northern Australia in Leichhardt’s copy of *Zoographie des Diverses Régions, tant de l’Ancien que du Nouveau Continent* by L.F. Jauffret (1799) .................................................................................................................................145
Figure 11. William Swainson, 1836? [by George Henry Harrison] ........................................153
Figure 12. Signs of ownership: Swainson’s bookplate and his gold-impressed crest of a stag passant on the spine of one of his books. ........................................................................167
Figure 13. Swainson’s library by subject. ......................................................................................171
Figure 14. British Library stamps in Schröter’s *Einleitung in die Conchylienkenntniss nach Linné*. .................................................................................................................................................174
Figure 15. Examples of Swainson’s annotations and marginalia. ..............................................178
Figure 16. Gerard Krefft and The Prince Alfred Ray, *Ceratoptera alfredi*, c1868..189
Figure 17. Dingo illustration by Krefft and as published by John Gould. .........................198
Figure 18. Agassiz’s examples of the dental plate of the Ceratodus in the copy used by Krefft to classify the Queensland Lungfish.................................................................................213
Figure 19. Plate from the copy of Bremser’s *Icones Helminthium* used and cited by Krefft: ‘Hammer-headed tape worm of Rudolphi, figured by Bremser’.....222
Figure 20. A copy of Krefft’s illustration in Owen’s *A Cuvieran Principle in Palaeontology* ........................................................................................................................................227
Figure 21. Two early cedar bookcases (1860s or 1870s) provenanced to the Museum and now located in the Australian Museum Archives.............242
Figure 22. The Library at Elizabeth Bay House.................................................................243
Figure 23. The boardroom, 1924......................................................................................245
Figure 24. Detail of [Sydney from Woolloomooloo], 1849 by G.E. Peacock.............248
Figure 25. Origins of the Australian Museum Lewis Wing...........................................251
Figure 26. Order of the Tower of the Winds.................................................................251
Figure 27. Classification scheme used in the AML’s 1883 catalogue..........................285
Figure 28. Page from the AML Catalogue, published in 1883.................................286
Figure 29. Example of a Database Record......................................................................294
Figure 30. Inscription of George Witt to the AML, 1852............................................297
Figure 31. Size of the collection at four points in time..................................................320
Figure 32. Proportion of the collection published in five main countries at four points in time........................................................................................................321
Figure 33. Comparative distribution of acquisitions in three decades according to key subject area.................................................................323
Figure 34. Comparative distribution of zoological acquisitions in three decades according to subject.................................................................324
Figure 35. Proportion of the collection in various formats at four points in time.........326
Figure 36. Age of titles acquired in three decades.........................................................328
Figure 37. The AML when temporarily located in a corrugated iron shed in the grounds of the Museum, 1890-92.................................................................345
Figure 38. Number of volumes held, 1883–1921..........................................................346
Figure 39. Plans for Museum extension with new library, 1911..................................351
Figure 40. Interior of the AML, c.1918...........................................................................353
Figure 41. Page from 'Arrangement of Catalogue Cards in the Australian Museum Library'.............................................................................................................370
Publications and Presentations

Publications


Presentations


____, ‘Behind the Scenes: Mr Bennett and Mr Macleay go Shopping’, A public program consisting of lecture and tour of the Australian Museum Research Library’s collection to celebrate the 150th anniversary of the NSW government’s first funding of books for the Museum, 12 November 2008.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS</td>
<td>Australasian Association for the Advancement of Science</td>
</tr>
<tr>
<td>ADB</td>
<td><em>Australian Dictionary of Biography</em></td>
</tr>
<tr>
<td>AMA</td>
<td>Australian Museum Archives</td>
</tr>
<tr>
<td>AML</td>
<td>Australian Museum Library</td>
</tr>
<tr>
<td>AMRL</td>
<td>Australian Museum Research Library</td>
</tr>
<tr>
<td>AMS</td>
<td>Australian Museum Series (in the AMA)</td>
</tr>
<tr>
<td>BL</td>
<td>British Library</td>
</tr>
<tr>
<td>BOA</td>
<td><em>Birds of Australia</em> by John Gould</td>
</tr>
<tr>
<td>DDC</td>
<td>Dewey Decimal Classification</td>
</tr>
<tr>
<td>LAA</td>
<td>Library Association of Australasia</td>
</tr>
<tr>
<td>LMS</td>
<td>Library Management System</td>
</tr>
<tr>
<td>ML</td>
<td>Mitchell Library, State Library of New South Wales</td>
</tr>
<tr>
<td>NMVL</td>
<td>National Museum of Victoria Library</td>
</tr>
<tr>
<td>PLNSW</td>
<td>Public Library of New South Wales</td>
</tr>
<tr>
<td>SLNSW</td>
<td>State Library of New South Wales</td>
</tr>
<tr>
<td>SMH</td>
<td><em>The Sydney Morning Herald</em></td>
</tr>
<tr>
<td>UDC</td>
<td>Universal Decimal Classification</td>
</tr>
</tbody>
</table>
Introduction

In 1843, when Alexander Macleay, Colonial Secretary of New South Wales, laid the foundation stone of the new building of Sydney’s Australian Subscription Library, the collection held one book for every 31 people living in Australia.\(^1\) In 2004, the 52.8 million items in Australian public libraries represented almost three items for every member of the population.\(^2\) If we also consider the collections held in our research libraries, special libraries, our homes, on our computers and those available via the internet, the gap between access to information in 1843 and that at the beginning of the twenty-first century seems incomprehensible. Yet for those wishing to know more about the history of books in Australia, even back to the earliest years of European settlement, answers can often be found among the tens of millions of items our libraries hold now.

These books, the physical survivors that form the remnants of some of Australia’s earliest libraries, can provide valuable information about those who wrote them, published them, printed them, sold them, owned them, and why they were acquired and how they were read. They can also contribute to our understanding of the technological, economic, social and intellectual influences affecting communication by print in nineteenth-century Australia.\(^3\) How to locate and make sense of this early book material in Australia, however, has become a pressing

---


issue in the face of increased access to electronic information, mass-digitisation of non-Australian library collections and the pressure on libraries to reduce the number of books stored in public spaces and, potentially, to discard material altogether.

This thesis focuses on the history and collection of one library, The Australian Museum Library (AML), Sydney, between 1836 and 1917, and explores whether in tracing the history of such an institution we can better understand the impact of its book collections on a community geographically isolated from the metropolis. More specifically, this thesis considers whether such a collection of books not only reflected the scientific interests, development and training of individuals in the community, but whether it also affected scientific outcomes in a place such as New South Wales. In order to answer this question, an understanding is needed of the origins and traditions of such a library, the library’s administration, its key stakeholders, the book collection and how and when it was formed, and evidence of the use of the collection and whether this use impacted on local contemporary scientific debate.

The subject matter of this thesis places it alongside others working in library history, but in the newest sense of the term—one in which the history of the book has often informed the way in which this dissertation has been structured. This thesis explores the history of the Australian Museum Library not simply as a celebration of an institution and its librarians, but rather looking at its collection as a series of physical objects with material stories to tell. It also uses statistical evidence compiled from the Museum’s archives as well as published sources to not only trace the early growth of the library but to identify relationships between the

---

4 For example, the most prominent provider of mass-digitised texts is probably Google Books. Although Australian material can be accessed this way, of the twenty-one libraries contributing scans of their books, none are Australian. Google Books, ‘Library Partners’, retrieved 31 January 2013, <http://books.google.com/googlebooks/library/partners.html>. This increased reliance, around the world, on a few ‘digital surrogates’ representing each publication accentuates the significance of individual copies stored in Australia, and access to these will be needed if we wish to continue researching particular aspects of our local book history.

library, its users and the broader theme of scientific development in nineteenth-century New South Wales. In a survey of the latest library history research trends in the United States, Donald G. Davis, Jr. observes that:

trained library historians are utilizing primary source materials more extensively in their research, resulting in more analytical approaches and treatments, in contrast to progressive and celebratory treatments.  

This more analytical direction has been increasingly adopted by those taking a multi-disciplinary approach to their research and Buchanan and Hérubel, in another survey of American library history research, note the growing importance of the history of the book and the history of reading to those working in library history.

The Aims of this Thesis

The initial purpose of this study was to identify and contextualise the nineteenth-century collections of one of Australia’s oldest, largest and still virtually intact museum libraries. This motivation has been driven not only by my experience of working as an employee of the Australian Museum Research Library (AMRL) between 2001 and 2004, but also my subsequent employment working with rare book collections in the library of the Historic Houses Trust of New South Wales. As online access and digitisation progresses, New South Wales government libraries with heritage collections are grappling not only with a rapidly changing profession but diminishing budgets as well. Concern about the future of some of our state’s little-known but highly significant book collections, as well as early

---


8 This new name coincided with the relocation of the library to its current position in the Still Addition in 1988.

9 Caroline Simpson Library & Research Collection, Historic Houses Trust of New South Wales.
book material across Australia more generally, has also been a motivation to undertake this research.\(^\text{10}\)

This is a thesis about a library and its history, however, and not contemporary library practice. While it is not intended to provide a 'how to' guide for those interested in identifying and interpreting their library’s heritage collections, this study may encourage a rethinking of the value and use of these collections. It may also assist in making links between contemporary libraries holding books in common from dispersed collections and show how the consolidation of this information provides opportunities to articulate the economic and social meaning of these objects from the time in which they were first used, as well as subsequently.

The main objectives of this thesis are:

1) to identify the antecedents to the foundation of a natural history library at the Australian Museum, both in the local and British scientific communities;

2) to outline the administrative history of the Australian Museum Library as well as the key individuals responsible for its development;

3) to formulate a method by which the earliest period of the AML’s collection development can be mapped and divided into periods in order to identify patterns of growth, sources of material, subject choices, countries of origin and the age of the material acquired;

4) to investigate the value of physically locating the contents of dispersed private collections within one or more libraries, as a way of not only adding biographical knowledge about the original owners of these libraries and evidence of their use, but also exploring the circumstances behind the formation of the AML’s subject-specific collection;

5) to track ways in which access to literature in the AML, at a given time, may have influenced the contributions made by staff at the Museum to scientific debate locally and overseas; and

6) to examine whether the professionalisation of science during the nineteenth century was reflected in the AML’s collections and management.

**Approaches to the History of Libraries**

Maxine K. Rochester’s review of Australian library history research in *Libraries and Culture* was a realistic, if celebratory, appraisal of library history activity up until the beginning of the 1990s. There was good reason for optimism: four forums on Australian library history had been successfully held in the 1980s (with another three forums to come by 1996), more postgraduate students were undertaking research in Australian library schools than ever before, and academics in the field were researching, presenting and publishing with vigour. It was within this environment that Peter Biskup’s *Libraries in Australia* (1994) was published, and while this overview was not a library history per se, Biskup refers to this aspect of his work in the opening paragraph of his introduction:

> The approach throughout has been unashamedly historical, despite the virtual obliteration of the concept, and even the word itself, from current professional curricula. Yet history, apart from being intrinsically interesting, can be a powerful diagnostic tool.

The disconnection between library courses and the study of history, identified by Biskup in 1994, was to be even greater two decades later: some library schools that were particularly active in library history have closed, such as at the University of New South Wales, while others, like Monash University, have shifted their focus in the face of the dominance of information technology and rapid changes to the profession. This shift was not entirely unexpected as there had been considerable discussion in international library journals about what form

---


library history should take in the future and where best to place it in relation to Library Information Science.\textsuperscript{13} Appearing in the same year as Rochester’s review, R.C. Alston highlighted the virtual disappearance of library history from schools of librarianship in the UK and America over the previous decade.\textsuperscript{14}

Even in Rochester’s relatively positive outline of Australian library history there were some perceived failures, particularly that ‘science and technology in library history tends to be neglected, as it does in Australian history research’.\textsuperscript{15} Library histories in Australia, as elsewhere, have focussed more on history from below, exploring the significance of the increased availability of reading material to workers in the nineteenth century through Mechanics’ Institutes and public libraries. The increased prominence of book history over the last two decades as a library history tool has provided the opportunity for a multifaceted approach.\textsuperscript{16}


\textsuperscript{15} Rochester (1990), p. 121.

This extends beyond the traditional ‘institutional’ history that has been seen as a barrier to broader acceptance of the work of library historians.\textsuperscript{17} It should be noted, however, that scientific literature is not completely absent from these library histories, but is more often a footnote in a broader thematic context.\textsuperscript{18}

There are surprisingly few international models for historical research on science libraries. While studies have tended towards the individual institutional approach,\textsuperscript{19} there has been some national research on scientific special libraries, such as Antonia Bunch’s monograph on hospital and medical libraries in Scotland,\textsuperscript{20} as well as personal libraries in the vein of Rees and Walters’ \textit{Library of Thomas Pennant}.\textsuperscript{21} Despite numerous publications about the history of museums, particularly natural history museums and their role in the history of science, little has been written about the role of libraries in the development of these institutions. Ann Borda’s field survey of London museum libraries, conducted over 1993–94, included a summary of the evolution of the museum library in England

\textsuperscript{17} A criticism made by Alistair Black and the impetus for his call for a change of focus towards a ‘history of information’ in Black (1998). The question of the quality of library history has been examined most recently by A.B. Wertheimer (2005).


and is the only study examining the historical development of museum library collections and their administration, but is not the central focus of the thesis.\textsuperscript{22} More recently, national histories such as \textit{The Cambridge History of Libraries in Britain and Ireland} have included some contributions on the specialist role of science libraries, as well as the history of the classification of their collections.\textsuperscript{23}

As previously mentioned, there have been some examples of scientific literature discussed in a broader library context in Australian research. Wallace Kirsop took this further in 1973 with his discussion of Melbourne scientific culture through the evidence of library catalogues and highlighted the ‘raw material’ available and the ways in which this material could be used.\textsuperscript{24} Ten years later, in a paper examining nineteenth-century sources of scientific information, Kirsop identified numerous sources, such as library and auction catalogues that describe private and institutional library holdings. Kirsop emphasised, however, the importance of the book-user, noting ‘one must ultimately give preference to evidence of reading and use rather than to mere indications of possession’.\textsuperscript{25} Beyond Kirsop’s work, there are examples of institutional histories such as Kathleen Steger’s dissertation on the medical library at the University of Melbourne,\textsuperscript{26} Ian Jack’s discussion of the private book collection of the Macarthur family at Camden Park,\textsuperscript{27} and Laurel Clark’s monograph on Melbourne bookseller and publisher of medical and


scientific works, Ferdinand François Baillière. In 2009, Joan Webb’s study of the library of English naturalist, George Caley, was published; though more a book list and biography, it is one of the few Australian studies of a private scientific book collection. While there was a contribution on science publishing in the landmark publication, *A History of the Book in Australia, 1891–1945* (2001), there was no discussion about scientific libraries in this volume.

In 2007, after a decade’s absence, the Library History Forum was relaunched at the State Library of New South Wales and its proceedings published by the *Australian Library Journal*. Two forums have followed since in Melbourne and while there have been some examples of library history produced by library schools, students in history are more likely to participate than in previous decades. Two recent examples of doctoral dissertations each from a history and library school, by Keith Adkins and Sue Reynolds, have been published. Both in the form of an extended case study of a non-scientific library, these works were informed by the history of the book. There is clearly scope for further work on collections of scientific literature in Australia in the nineteenth century.

The history of the book has provided scholars working across a range of disciplines a common, if somewhat broad space within which to consider book and print culture. Robert Darnton’s influential article ‘What Is the History of Books,’ published in 1982, highlighted the numerous interdisciplinary approaches by

---


33 Darnton (1982).
those working in the area of books and communication and proposed that a holistic view was required to prevent the fragmentation of book history altogether. Darnton had come from the French scholarly tradition of the *Histoire du Livre*—one interested less in bibliographic detail than the ‘general pattern of book production and consumption over long stretches of time’. With sources of archival, library and statistical evidence in mind, Darnton offered his readers *The Communication Circuit*, a model showing the communication process in which the relationship between the transmission of texts and their outside influences was conveyed. While aspects of this model were challenged by some in bibliographical circles, Darnton provided a springboard from which many have been able to contribute further thinking about book and print culture, as well as the reception of texts.

Darnton places libraries at the end of the communication circuit in the ‘Reader’s’ box: the place in which the reception of texts is the key focus. Here we can place the work of a number of scholars interested in the history of reading and reading communities. Roger Chartier places importance on the contextualising of the act of reading by contrasting reader responses to the same story in different forms. Michel De Certeau is also interested in the evidence of reader responses and while he describes a hierarchical structure of reading where official interpreters such as teachers, intellectuals and critics reveal the meaning of a text, he believes the common reader transgresses behind closed doors. The reader brings her own

---

34 ibid., p. 67.
35 Ibid. p. 66.
37 For further discussion see Martyn Lyons, ‘The History of Reading and Reading Communities’, *Bibliographical Society of Australia and New Zealand Bulletin*, vol. 21, no. 1, 1997, pp. 5–15.
38 Chartier uses the *Bibliothèque Bleue* as an example of the same text appearing in a different physical form – abridged and with pictures – suggesting that they were used by a different type of reader from the more literate forms of the works. Roger Chartier, ‘Text, Printing, Readings’, in Lynn Hunt (ed.), *The New Cultural History, Studies on the History of Society and Culture*, Berkeley: University of California Press, 1989, p. 171.
meaning to the text while trespassing—leaving parts of the self and remnants of other texts read—while simultaneously ‘poaching’ from this textual ‘estate’.

Perhaps of greater relevance when thinking of a library context is the work of those interested in communal responses to text, such as the earlier work of American literary theorist, Stanley Fish. In the mid-1970s Fish took to task theorists who made the assumption that there is ‘a sense, that it is embedded or encoded in the text’ of a work. He argues that through this approach the reader is not only ignored because the text is taken to be ‘self-sufficient’, but also devalued because the reader is thought of as a ‘disposable machinery of extraction’. Fish proposes that readers can be grouped into ‘interpretive communities’—people who share interpretive strategies when creating their own meaning—but with limits imposed by the guiding criteria of the group. The reading community agrees what texts belong to it, what is good and what is bad and Fish suggests that the interpretive strategies exist within the group prior to the act of reading and therefore shape what is read. We are likely to belong to many interpretive communities simultaneously and Fish points out that interpretive communities are not fixed or even particularly stable and that ways of interpreting can change, can be ‘forgotten or supplanted or complicated or dropped from favour’.

The sociologist Pierre Bourdieu provides a more concrete way of considering the factors that enable or hamper appropriation of culture by members of a society and this is relevant to the reading historian. Bourdieu distinguishes between three types of cultural capital: first is the ‘embodied’ state, where cultural capital is embodied in the individual, such as the cultural traditions learnt from one’s family. Second is the ‘objectified’ state and represents objects that are owned, such as books. Bourdieu suggests these can only be ‘consumed’ if we have the correct type of embodied capital and, in the case of books, the facility to interpret them. Third is the ‘institutionalized’ state, namely the educational credential system—where a

41 Ibid.
42 Ibid., p. 457.
good job and higher social position is reliant on having a higher education. Bourdieu provides a framework with which we can view groups of readers from a cultural rather than purely socio-economic perspective and may have a relevance to early New South Wales, where, by the 1830s, a status-conscious elite had emerged from the artificial social structure of a penal colony.

One of the most striking examples of the study of readers and the history of science has been James A. Secord’s *Victorian Sensation* (2000), in which the author undertook an ‘object study’ of a single book and the history of its reception. Secord traced all forms of response to the anonymous *Vestiges of the Natural History of Creation* (1844), during the first half of the nineteenth century, whether they were printed, in letters, illustrations, gossip or the tracing of scientific terms first coined in the book as ‘cultural tracers’. Through this study of one title, Secord explores the impact of print as a driver of cultural change in the industrial age. Can a comparison be made on a smaller scale with a specialised book collection in a colonial society? Within the microcosm of a relatively isolated book community, can we measure the effect of inconsistent access to scientific texts on local responses to scientific debate?

As we have observed, book history has been increasingly adopted by those interested in writing about libraries and their history. The quantifying of book resources available at a given time, the search for archival evidence to support our knowledge of the book trade, the increased focus on the materiality of books, and the ways in which we can explore the reception of texts by readers and communities have all provided great opportunities to those working with library history and form the basis to the approach of this dissertation.

Access to Scientific Literature in Australia Prior to Federation

Libraries were not on the top of the agenda of the first Europeans settling in Australia in the late eighteenth century. Survival was the primary consideration of these early settlers and the lack of those with sufficient education or with the available leisure to follow scientific pursuits dampened any desire for scientific literature in the colony. The concentration on the development of ‘local productions’ preoccupied its new inhabitants for almost a century and the type of literature arriving during the earlier years of the colonies tended to reflect the practical needs of its users. From the beginning of settlement we know medical men, such as George Bass, brought their libraries with them. A listing of Bass’ library in 1800 shows approximately 100 volumes spanning a range of subject areas and included history, philosophy, literature, the classics and numerous medical works. Until well after the 1830s, when booksellers had made their first tentative appearance in Sydney, early settlers were reliant on parcels from outside the colony or the libraries of their friends and neighbours. Letters written in the 1830s from Dr George Bennett, the Australian Museum’s first curator, to Richard Owen in London are peppered with requests for journal issues and books that he was keen to read and numerous complaints about late and lost periodicals in the mail from England.

It was the act of sharing book resources that enabled the founding of the library of the Philosophical Society of Australasia in 1821. Established by some of Sydney’s leading citizens under the patronage of Governor Brisbane, the society was formed for the purpose of collecting information with respect to the natural state, capabilities, productions, and resources of Australasia and the adjacent regions,

49 AMS37, George Bennett Papers, 1833-40.
and for the purpose of publishing, from time to time, such information as may be likely to benefit the world at large.\textsuperscript{50}

In order to ensure there was sufficient access to scientific literature to fulfil this grand ambition the society created a combined catalogue of its members’ personal libraries, but this was abandoned with the demise of the society within two years. The method of combining private libraries was again proposed fifteen years later, in 1836, by the members of the committee responsible for the establishment of the Australian Museum. There is no record of the implementation of the plan, but there is little doubt that many of the members of the committee would have been keen to access the large natural history library of the committee chairman and Colonial Secretary of New South Wales, Alexander Macleay.

Macleay was also one of a small number of ‘gentleman scientists’ and members of the New South Wales Legislative Council involved in the establishment of the Australian Subscription Library and Reading Room in 1826. A forerunner of the State Library of New South Wales, this library was based on the British model with an entrance fee and an annual subscription large enough to discourage the ‘less savoury’ members of Sydney’s society. Undoubtedly there were works of science listed in the library’s first catalogue as its early minutes boast that the ‘initial list of books to be bought was unimpeachable, containing hardly a work of fiction except “Walter Scott’s novels”’.\textsuperscript{51} More accessible to the colony’s workers was the Sydney Mechanics’ School of Arts. Established by Governor Bourke in 1833, it was reported some four years later that the school had received enough scientific equipment to make demonstration lectures possible and, in 1842, the library catalogue listed 110 volumes covering the sciences.\textsuperscript{52} Though a modest collection when compared to the estimated 1,000 scientific volumes in Alexander Macleay’s library at this time,\textsuperscript{53} the School of Arts played a significant role in providing


\textsuperscript{51} Richardson (1961), p. 67.

\textsuperscript{52} S. Jack (1988), p. 59

\textsuperscript{53} This is based on the number of volumes listed under Zoology, Botany, Mineralogy and Geology, Natural Philosophy, Chemistry etc., and Medicine and Arts in the auction catalogue for Macleay’s
workers with access to scientific literature in New South Wales and beyond for much of the nineteenth century.\textsuperscript{54}

Numerous societies were formed and disappeared during the second quarter of the nineteenth century and it is probable that some of these had small collections of books. It is not certain whether the Agricultural Society, the Australian Society, or the Australian Floral and Horticultural Society had libraries, but we know that the Australian Medical Subscription Library came and went in the 1840s and a few of its volumes are now located at the Australian Museum.\textsuperscript{55} Governor Brisbane’s scientific library was purchased by the New South Wales Legislative Council in 1825,\textsuperscript{56} later transferred to the Sydney Observatory, and is now housed and administered by the Powerhouse Museum Research Library.

While much of the Australian scientific activity—what there was of it—occurred in New South Wales during the first sixty years of European settlement, Tasmania had also developed a number of scientific societies early in the nineteenth century. The Van Diemen’s Land Agricultural Society was formed in 1821, the Mechanics’ Institution in 1826 and its library established in 1829, followed by the Van Diemen’s Land Scientific Society in the same year. Not long after the arrival of Governor Sir John Franklin, in 1837, the Tasmanian Society was established and Australia’s first journal on natural sciences appeared—more than twenty years before New South Wales was able to provide a journal of similar quality. In 1844 the Royal Society of Van Diemen’s Land for Horticulture, Botany and Advanced Science began.\textsuperscript{57} The first book for the Society’s Library was ordered in 1846 and in 1847 the University of Cambridge presented several bibles and books on

\textsuperscript{54} Morris (2000), pp. 35–40.


\textsuperscript{56} ibid., p. 71.

divinity. Following an injection of money from Governor Sir William Denison, work on the library was first noted in the society's 1848 report, including a new concentration on the acquisition of scientific texts. The library's catalogue—the first largely scientific library catalogue in Australia—appeared in the society's 1850 annual report and was published as a separate volume in 1856. It has been suggested that the opportunity to exchange the Society's journal with other institutions from this early date meant that, arguably, Hobart had 'the most complete library of scientific periodicals in Australia, at least until the 1880s'. Like Governors Brisbane and Franklin, William Denison encouraged scientific activity wherever he was based and while he was an important figure in the development of science in New South Wales in the 1850s, the days of Vice-Regal scientific patronage were coming to an end.

The granting of self-government in the 1850s marked a growing self-perception among the colonies of 'permanence and self-sufficiency'. With this increased confidence bolstered by the gold economic boom, institutions that required scientific literature to support their activities were established, or at least formalised, across the country. During the second half of the nineteenth century, philosophical societies adopted the framework of the Royal Society and became increasingly segmented and specialised. More scientific societies produced their own journals, which provided the opportunity for authors to contribute to a scientific publication rather than the local newspapers. This also provided societies and institutions with the advantage of acquiring international journals through exchange. In the 1880s, universities made a greater commitment to science and the first union catalogue of scientific serial literature was published in

---

59 ibid., p. 154.
Sydney, while international developments in the organisation and management of library collections were also beginning to be reflected in activities within Australian libraries. By the end of the century scientific literature was available in a variety of libraries, which T.S. Hall, author of the *Catalogue of the Scientific and Technical Periodical Literature in the Libraries in Melbourne*, divided into four categories: public libraries and those connected with educational institutions, societies and government departments.

Anecdotally, there has long been gentle competition between some of Australia’s oldest institutional libraries over which ‘started first’. Putting aside the worth of such a debate, the fact that there is debate highlights the difficulty of deciding when a collection of books becomes a ‘library’. The Australian Museum Library is typical of these early institutional book collections with an uncertain starting date. In 1836 the museum committee resolved to have a bookcase for scientific works for reference. Twelve years later in 1848, the first book donation to the museum was recorded, and a year after that, a board sub-committee was established to ‘select and order such books from England as they may think best to form the nucleus of a library of natural history’ but acted no further. George Witt, a committee member of the Museum, inscribed a book he had donated to ‘The Library of the Australian Museum’ in 1852 and this is the earliest known volume in the Museum with a specific mention of a library. In 1853, the Australian Museum was incorporated and in 1854 the first multi-titled donation, consisting of 80 volumes, was made by Philip Parker King. So which date does one choose: 1836,

---


66 AMS1, Minutes of the Board of Trustees (Trustee Minutes), 8 June 1836.

67 AMS1, Trustee Minutes, 12 August 1848.

68 AMS1, Trustee Minutes, 24 March 1849.
1848, 1849, 1852, 1853 or 1854 for the commencement date of the library? Some could argue further that the real start date should be 1858, when Parliament allocated £500 for the ‘purchasing of the necessary works of reference’, while others might even suggest the publication of the first printed catalogue in 1883 is the better place to start. It is clear that an important private source of scientific books in the colony was discussed at the first Australian Museum Committee meeting in 1836 and was probably available to some of the Museum’s associates, but there is no evidence of an institutional collection being formed at this time. When George Witt donated his book to the ‘library’ in 1852, fewer than ten titles have been identified as being held by the Museum at this time and there was probably little more than a shelf of books. The question of a museum library was not specifically addressed in the process leading up to the Museum’s incorporation in 1853, but does appear to have provided greater certainty to the institution and may have encouraged potential book donors to feel confident that any gifts would be accepted for the longer term. Therefore, Phillip Parker King’s donation of a small part of his library to the Museum in 1854 marks the real beginning of a library at the Australian Museum and was followed by his larger donation not long after. Regardless of the usefulness of the content of the library, it provided a physical bulk that needed to be managed and had moved beyond the ‘distributed’ library articulated by the Museum Committee in 1836. More importantly, however, these various possible start dates reveal that the creation of such a library can be a gradual process that is dependent on need, finance, administrative capability and commitment to succeed—all reflecting the place of science in the institution and the broader culture of the time.

The relative ‘worth’ of these libraries at any given time is equally difficult to define. What value did they hold to their immediate users, the broader scientific community and the colony as a whole, in the case of government-funded institutions? In 1901, the National Museum of Victoria’s library was noted for its ‘fine sets’ of books but was considered impenetrable by those outside the

69 AMS1, Trustee Minutes, 5 August 1858.
institution and it is a description that could be applied to many of the book collections in the nineteenth century and, some would argue, much later. Established in the late 1850s, the Museum’s director, Professor Fredrick McCoy, had a relatively free hand to form a significant collection of eighteenth and nineteenth century works on natural history before the purse strings were pulled tight in 1864. The function and future of the library was determined in 1870 when the National Museum came under the control of the new Library, Museums, and National Gallery Act. At the same time, a comprehensive serials exchange program was started at the Museum following the serialised publication of McCoy’s *Prodromus of the Zoology of Victoria* and enabled access to material that the library could not otherwise afford. The activities of the library were permanently curtailed when the Museum was relocated adjacent to the Public Library in 1906 and acquisitions were reduced significantly compared to their equivalent institution in Sydney. In summary, a fine book collection was acquired primarily for the use of the Museum’s director, was expanded through an exchange program and then significantly stunted following the shift of resources to the Public Library nearby.

While access may have been difficult in some areas, the founding of universities in Sydney and Melbourne in the 1850s planted the seed for much greater access to scientific literature by the end of the century. The start for both university libraries was relatively slow and the influence of these collections was not felt until the early 1890s. As the age of university-led scientific research had not yet arrived, scientific activity in the 1860s and 70s was driven by the fashion for holding international and intercolonial exhibitions, where government and other scientists had an opportunity to meet and informally discuss science and technology. The popularity of these events among the general public reflected a greater interest in the world of ‘steam engines, photography, hot-air ballooning

71 Hall (1901), pp. 68.
and the novelties of zoology, telegraphy and electricity [which] were an increasing part of everyday life'.

The 1870s also saw popular excitement in the sciences inspired by the visit of the ‘Challenger’ expedition and its oceanographic activities in the region, the reorganisation of the Royal Society of New South Wales and the founding of the Linnean Society of New South Wales. The gusto with which both these societies and the Australian Museum acquired scientific literature, often the same titles, for their respective libraries suggests stiff competition, a complete lack of co-ordination or both. The inefficiency of this collection development seems even harder to understand when it is clear that there were members common to all three organisations. As early as 1879, Archibald Liversidge articulated his vision for the Royal Society of New South Wales library:

One of the main objects of the Sydney Society is to serve as a central institution for the exchange of scientific publications between institutions in Australia and those foreign countries.

Since 1874, the Linnean Society had been accumulating books by donation and exchange along with £1200 worth of books purchased by its President, William John Macleay. The library’s catalogue, published in early 1882, consisted of 38 pages and documents the collection that was destroyed in the Garden Palace fire of September 1882. Undaunted by a disaster that would have brought most organisations to their knees, the Society immediately began purchasing books and exchanging its proceedings with other

---


76 Richardson (1961), p. 132.


institutions and, in 1886, published a new library catalogue that included the names of 99 exchange partners.\textsuperscript{80} Perhaps here lies the clue to why these organisations were collecting duplicate journals—each produced their own publications and had the means by which they could exchange and collect. In 1925, the Linnean Society’s secretary observed that ‘the Society’s library has been built up almost entirely by exchanges obtained for its Proceedings’\textsuperscript{,81} Inevitably there would be a storage and administrative limit to such uncoordinated behaviour and, in 1889, the Professor of Anatomy at The University of Sydney, T.P. Anderson, made calls for improved organisation of scientific literature in Sydney, where ‘better results could be achieved, by each library seeking to have complete series in its own special department, rather than incomplete series in many different departments’\textsuperscript{82}

While the duplication of scientific literature in New South Wales libraries in the last quarter of the nineteenth century may be indicative of an active exchange culture, there is a hint of something more in G.H. Knibbs’ Anniversary address to the Royal Society in 1899:

\begin{quote}
The scientific libraries of Sydney – the capital of the mother colony of Australia – should surely be the most complete in the Southern hemisphere; and it is to be hoped that neither ignorance nor niggardliness will prevent us equipping them with those great works and journals absolutely necessary to our efficient cooperation in the intellectual and industrial advance of the world.\textsuperscript{83}
\end{quote}

Despite an uncoordinated approach to the collecting of scientific literature and the financial constraints of the Depression years of the 1890s, the previous decade had marked a period of burgeoning library catalogue publications across Australia. During this time catalogues were produced by the Public Library of Victoria, the Australian Museum, the University of Sydney, the Linnean Society, the Parliament of NSW, and the Royal Societies of NSW and Tasmania, to name but a few. Wallace Kirsop, in his study of scientific culture in Melbourne using library catalogues,

\begin{flushright}\textsuperscript{80} Walkom (1925), p. 27.\textsuperscript{81} ibid., p. 28.\textsuperscript{82} Dayton and Anderson (1889), p. iii.\textsuperscript{83} G.H. Knibbs, ‘Anniversary Address’, \textit{Royal Society of New South Wales}, vol. 33, 1899, p. 41.\end{flushright}
highlights the pervasiveness of these publications in the ‘age of cheap printing’ where ‘inventories of the holdings of the smallest collections could be and were quite readily produced’. While catalogues do not necessarily tell us what was being read, how often, or with what influence, at the least they can tell us what was held by the library at set periods of time.

The absences from these catalogues may also tell us something about the collection policy of libraries. For example, the 1883 library catalogue of the Australian Museum does not list Darwin’s *Origin of Species* (1859) and we know the book was not accessioned by the library until the late 1880s. The work had been highly contentious in Australian scientific circles since its first publication and created tension between the Australian Museum curator, Gerard Krefft, a follower of Darwin, and more conservative members of the Australian Museum Board. So does the absence of this particular title from the library tell us anything? Perhaps Gerard Krefft had his own copy while working at the museum and no one thought to purchase a copy for the library. Comparisons with other libraries at the time provide a context: *The Catalogue of the Free Public Library, Sydney,* lists a copy of the Darwin among its holdings in 1879, while the University of Sydney Library catalogue for 1885 does not. On the other hand, the Royal Society of New South Wales held an 1878 edition in 1889 and the library of the New South Wales Government Railway Institution is listed as holding an 1880 edition of the Darwin in 1890. To be confident that some libraries did not hold a title, however, one would need to check receipt and register records of acquisitions, explore correspondence of the users of the library at the time, and consider alternative sources of access for material missing from a library’s collection.

---

84 Kirsop (1973), p. 50.
86 Free Public Library, Sydney N.S.W., *Catalogue of the Free Public Library, Sydney, 1876. Reference Department, Sydney: Govt. Printer, 1878*.
87 University of Sydney Library, *Catalogue of Books in the Library of the University of Sydney, Sydney: Gibbs, Shallard, 1885*.
Such absences also raise questions about the staff who maintained these libraries; particularly as the responsibility of maintaining these collections was considered little more than a clerical function. The introduction of new classification systems, attempts to form and sustain a library association, and the increased use of the title ‘librarian’ all occurred in the late nineteenth century in Australia and were to affect the way libraries were managed and the way patrons used them. Did these advancements improve the standing of the ‘keeper of the books’ within the organisation and did it eventually give the librarian greater power in choosing library material? It is interesting to speculate whether the early signs of specialisation experienced by the librarians would eventually reduce the power of the scientists in their day-to-day choice of scientific literature for their library.

While the subject of scientific libraries in Australia in the nineteenth century is broad, published information is relatively scant. As the century progressed, the world of science became more complicated, specialised and professional. Consequently, the pre-1850 scientific library is mostly represented by the ‘gentleman naturalist’ and his private library and reflects a relatively simple scientific landscape. However, the study of this period is handicapped by a lack of primary resource material and requires particularly creative research strategies to extract meaning. After 1850, scientific book collections were more likely to be attached to institutions and are often represented in print by library catalogues. The survival of accession registers, purchase invoices, borrowing records and related correspondence means that there is a better chance of tracking activities within these libraries. Studies of this later period are also more likely to include bibliographical surveys of collections because of the greater availability of printed catalogues. If there is a warning in how best to approach scientific library history during this period, it is that one should not be concerned only with the lists of books available in these collections. While they are important in helping us understand what may or may not have been held by a particular library, they tell us little about the readers and what they read or the contexts within which they read. We must be reminded to look at the readers themselves, their correspondence and the scientific and personal networks that had created the need for these libraries in the first place.
The Sources

Many of the most important sources used for this study were located at the Australian Museum in both archival and published form. The Australian Museum Archives (AMA) has a particularly rich collection relating to the Museum’s nineteenth-century history and includes documentary material detailing the development of the Library’s collection and its administration. The Minutes of Board of Trustees Meetings, 1836–1966, are the primary record of day-to-day activity at the Museum and provide not only a chronology but also details such as book purchases, the acquisition of library furniture, and even the occasional requests to borrow books. While the minutes are often the only source of information available for particular events or at particular times, an additional invaluable source was the record of outward and inward correspondence, 1837–1926, combined with regular reports prepared by the Curator, 1881–1918, and Secretary, 1889–1916, especially for the later years covered by this thesis.

In addition to these general documentary sources, the AMA holds archives specific to the library’s administration. While much of this material relates to library business in the late nineteenth and early twentieth centuries, a series of files containing book invoices and book purchase correspondence, 1853–1884, proved very useful for the earlier periods explored. A detailed account of the AML’s early collection development is revealed when the information contained in this series is matched against books listed in the AML’s published catalogue (1883), the AM’s annual reports for the same period, and book titles listed in the Library’s book register. While the lack of loan registers and the absence of information relating to decisions made by the Museum’s book subcommittee has been frustrating, the quality of many of the library-related records has provided excellent research opportunities for this project as well as the potential for research in the future. The Australian Museum’s library records complement similar archives held for libraries belonging to the National Museum of Victoria, the Linnean and Royal Societies of New South Wales, the Parliament of New South Wales and the Royal Society of Tasmania, to name but a few.
The Mitchell Library (within the State Library of New South Wales) holds numerous papers relating to some of the main identities associated with the Museum, including the papers of Gerard Krefft, the Macleay family, Edward Pierson Ramsay and Ludwig Leichhardt. The Mitchell Library also holds administrative documents created by the Australian Museum while in the possession of Leichhardt’s library and prior to the transfer of the collection to the Public Library of New South Wales. The access provided by the Mitchell Library to microfilm copies of primary sources located in British archives and libraries, such as the Colonial Office Correspondence, was invaluable. Similarly, Australia has been well-served by the number of publications of the edited letters of Australian early scientists and these include the letters of William Branwhite Clarke edited by Ann Moyal, those of Ludwig Leichhardt edited by Marcel Aurousseau and John Gould’s edited by Gordon C. Sauer.

The book collections and their annotations at the Australian Museum and a selection of other Sydney libraries have been a key source of additional information about activity at the Australian Museum and of its associates. At its simplest, indications of provenance combined with records of acquisition have enabled a much better understanding of the development of the early AML. Locating books with copy-specific information in a large library requires a number of strategies. However, after exhausting all the bibliographic sources and tools a library can provide, many relevant books can only be identified by systematically working through large parts of the collection. This approach was used at the AMRL to identify the Library’s early collections and the volumes from the libraries of Ludwig Leichhardt and William Swainson. A similar approach was used to locate the Leichhardt volumes at the State Library of New South Wales. In addition, exploratory research was conducted at Fisher Library (University of Sydney) to identify books that had belonged to George Bennett and Alexander and William Sharp Macleay and there is scope in the future for more work on these significant private libraries.
Methodological Approach and Organisation of Chapters

As this is not primarily an institutional or biographical history, but rather the history of books and their readers within an institutional setting, the seven chapters of this thesis, in addition to this introduction and a concluding chapter, consist of a combination of narrative chapters, case studies – biographical and bibliographical – and statistical analyses. These are then followed by a separate volume of biographical, bibliographical and statistical appendices. As one of the main objectives of this thesis has been to reconstruct the early development of the Museum library’s collection and evidence of its use, by employing a range of methods, common themes are drawn across a number of the chapters to link these different approaches and create a complete picture.

The lack of formal library documentation identifying those who used the AML and what they borrowed during the period under study has meant that other sources have been considered to evaluate evidence of use, such as the availability of texts to those who published their research. The challenge has been even harder when trying to establish whether there was a common group of readers in Sydney with interests in natural history and who shared this interest through their private book collections prior to the founding of the AML. Chapter One identifies who these key players may have been between the establishment of the Museum’s first Committee of Superintendence in 1836 and the death of the founder of the Museum, Alexander Macleay, in 1848, by using prosopographic analysis—a biographical technique previously used in the study of ‘gentlemen scientists’. The aim of this small biographical study of the individuals associated with the early development of the Australian Museum is to identify common traits drawn out by a set of questions. Not only was natural history literature scarce in the colony at this time, but the available books were unevenly distributed and this chapter seeks


not only to identify how books were acquired by this group but also what evidence there was of sharing between its members. The question of whether private literature owned by those on the museum committee was made available to staff at the Australian Museum for their work is also considered, and is tested by using a bibliographical source analysis of the Museum’s first published catalogue of specimens.

This narrative of the AML’s development prior to the Library’s founding in the early 1850s is then continued in Chapter Two, where an overview of the library’s administrative history continues up until 1883, when the library’s first catalogue was published. The three chapters that follow consist of a series of case studies. Chapter Three is divided into two sections: each a case study of the two libraries of Ludwig Leichhardt and William Swainson, and each study is roughly broken into three parts. The first provides a biographical study of the men with a focus on their known relationship with books, the second section focuses on the bibliographical and physical identification of volumes once stored at the museum, and the final section considers the evidence of use of these collections by each of their owners and the significance of these remnant libraries. This focus on the use of the libraries prior to their acquisition by the Museum not only provides new information about the way in which these naturalists worked, but also aims to identify links between the owners of the books and those who acquired and used them at the Museum. The scientific network of this period was often based on relationships that were personal, intellectual and spanned a number of countries.

Chapter Four is similarly concerned with the way in which the books at the AML were used for scientific activity, but this time looks at their use by those working at the institution itself. A biographical study of the early training of the zoologist and Australian Museum curator, Gerard Krefft, is followed by three case studies in which Krefft’s development as a scientific worker is traced through a sample of his publications, as well as his use of available texts within the Museum to contribute to scientific debate. The final chapter in this group, Chapter Five, explores the domestic setting in which the gentlemen of the Museum stored their private libraries and specimen collections and what influence this had on the design and
management of the AML. The chapter also compares the AML to comparable libraries in Australia and England and traces its shift from a ‘gentleman’s society-like library’ to an institutional library managed by government employees.

At the core of this thesis, and a major component of its methodological innovation, is the database I have constructed which has revealed the content and growth of the AML between 1836 and 1883. Chapter Six describes the methodological approach as well as the results of my study of the collection’s development during this period. For the first time, the earliest book collection of one of Australia’s oldest and most significant scientific libraries has been identified and reconstituted in the database. Primary records in the database were initially created using both the Library’s 1883 printed catalogue and library register and these were supplemented with library-related data from the Museum’s annual reports, book purchase invoices, the Trustee Minutes, correspondence and other sources in the Museum’s archives. Having identified over 1,000 titles from this early library, I then sought to locate these books and link each electronic record to its matching object and found almost 95% of the early library was extant. The tools of historical and physical bibliography were then used to identify additional information such as provenance, the use of AML library stamps, bookseller and bookbinders labels and marginalia and this information was added to the database. The results of this exercise were rich and enabled the identification over decades of the rhythm of acquisitions, the fluctuations in subject matter, the shifts in the age, language and format of the literature acquired, the changes in the countries of publication and purchase source, and the patterns of provenance. By connecting this dynamic recreation of the early library with the historical events that formed one of Australia’s premier scientific institutions, the value of this approach for libraries of this size and age is demonstrated.

Chapter Seven continues the narrative of the Library’s development from 1883 up until 1917 and looks at the library staff and their management of the collection within the context of the arrival of new information systems and increased collaboration between libraries in Australia. The chapter closes with the death of Sutherland Sinclair, the first Australian Museum employee to use the title ‘librarian’
and who introduced practices that extended the role beyond those of a clerical position. This study finishes at a point of change not only for the AML but for the Museum more generally. Sinclair’s replacement, W.A. Rainbow, was the first person to be offered a job solely dedicated to the management of the library and remained in the position for 34 years. The Museum’s Curator, Robert Etheridge Jnr., died only two years after Sinclair and the Museum entered a period of low growth and limited innovation that lasted well into the 1950s.92

It is inevitable that a library history will be about people. During the course of this study, it became clear that there were some individuals who would feature more than others. Gerard Krefft is one of these individuals and continues to be well respected by the scientific community as having made a significant contribution to science in nineteenth-century Australia.93 While he appears not to have been a driving force behind the development of the AML, he arrived just as an influx of new book material was acquired and his requests for literature and his use of it are the best documented during the period under study. Consequently, the figure of Krefft features strongly throughout this thesis. Dr George Bennett, the Museum’s first curator and who was also closely involved with book purchases for almost thirty years, also appears in numerous chapters. Other figures treated biographically are Alexander Macleay (Chapter One) and members of his family, Governor William Thomas Denison (Chapter Two), Ludwig Leichhardt and William Swainson (Chapter Three) and Secretary and Librarian, Sutherland Sinclair (Chapter Seven). In addition to these individuals, the names of key players have been marked with an asterisk, to indicate that they are included in a list of short biographies in Appendix A.

Despite the initial scarcity of scientific book material in nineteenth-century Australia and the struggle to establish lasting institutions which could maintain and develop scientific libraries, significant collections had been formed by the

92 Ronald Strahan, Rare and Curious Specimens: An Illustrated History of the Australian Museum, Terrey Hills, N.S.W.: Reed, 1979, p. 63.
close of the century. Many of the smaller society libraries have since been subsumed within larger collections, have been dispersed, are in storage, or have fought valiantly to survive into the twenty-first century. Some of Australia’s largest scientific libraries have fared only slightly better, while the specific ‘working nature’ of scientific libraries tends to conceal much of their activity from public view. This thesis not only examines a library barely known beyond its walls, despite its tens of thousands of volumes, but it recreates the Australian Museum Library’s collection during its earliest years and considers the contexts of its acquisition and the interplay between the library and scientific activity within the Australian Museum. By employing multiple research techniques and drawing together theoretical approaches such as the history of the book and library collection analysis, this thesis provides a unique contribution to our knowledge of Australian scientific scholarship and access to published information during the nineteenth century.
Chapter One: Origins of the Australian Museum Library: Local Naturalists, Their Social Networks and Their Books, 1796–1848

If there was one man who personified the power, passion and utility of an extensive private book collection in New South Wales between the 1820s and 1840s, it was undoubtedly Colonial Secretary and naturalist, Alexander Macleay (1767–1848)*. An examination of the content of Macleay’s library, which consisted of more than 4000 volumes, reveals a depth and breadth of scientific literature rivalled by few, if any, individuals or institutions in Australia at that time. The existence of such a book collection in the colony during a period when home-grown publications were rare and access to overseas titles limited raises questions about how information was being shared by those interested in natural history. Given that scientific books were scarce and expensive in Sydney and that the few non-private libraries available offered slim pickings to those scientifically inclined, the communication of scientific information in the antipodes was likely to differ from the methods familiar to Macleay’s associates back in London.

Like a church steeple in a small town, the size of Alexander Macleay’s library acts as a lightning rod to anyone interested in the early scientific book scene in New South Wales. He not only had the largest library, but was highly influential among those interested in local natural history. I will take advantage of Macleay’s ‘visibility’ and his role in the founding of the Australian Museum (AM) to explore the network of individuals with whom he was first associated at this fledgling institution. A number of these men continued their relationship with the Museum for many decades and evidence of the books they owned, their links to scientific activity, the publications they produced and how they acquired their scientific literature will help us understand how the interests and needs of these players were to influence the early shape of the Australian Museum Library (AML).

Members of scientific societies in Britain in the early nineteenth century often had exclusive access to the literature held by their institution, and this important source of information was lost to the members who emigrated to Australia. Colonists were frustrated by the lack of access to these collections and some
appear to have developed a book-sharing solution to combat the lack of local library resources. The highly stratified social structure of the colony, however, meant that any book sharing was likely to mimic the restricted access of the societies in the metropolis.

This chapter will explore whether there are indications that a network of readers who, having once participated in gentlemen’s scientific societies in England, continued to function as an informal outpost in a colony unable to sustain the more established structures of ‘home’. Documentary evidence of those Macleay associates who produced, purchased, shared and read book material locally and overseas suggests that such a ‘reading community’ probably existed.

The Museum’s First Association of Scientific Gentlemen

On 8 June 1836, the committee of superintendence of the newly named Australian Museum met for the first time to discuss its humble charge. While the Museum had received its initial funding for a government zoologist in 1829, the death of its occupant, William Holmes, in 1831, saw the position fall vacant until the employment of Dr George Bennett (1804–1893)* in 1835. For most of this period the small collection of specimens had been housed in the old Legislative Council Building in Macquarie Street, but the museum had been relocated to a single room in the Chief Justice’s old house on Macquarie Place by the time the new committee was appointed.¹

At the Committee’s first meeting it was decided that not only should ‘a Book-case be provided for such Works on Scientific Subjects [as] may be required for the use of the Museum’ but that ‘members of the General Committee be requested to furnish a list of such books upon natural history as they possess which may be required for reference’.² Access to scientific literature was clearly considered a priority for the new institution. We have a fragmentary knowledge of the personal libraries, reading interests and book purchases of the ten men appointed by the

¹ Strahan (1979), p. 16.
² AMS1, Trustee Minutes, 8 June 1836.
Governor, many of whom had made a contribution to science or exploration in the colony. Scientific volumes from the libraries of Phillip Parker King (1791–1856) (Appendix D) and John Vaughan Thompson (1778–1847) (Appendix E) were donated to the AML in the 1850s and 60s, some of which are still held there today. The library of Alexander Macleay was renowned at the time and is well documented through correspondence, publications and in the auction catalogue produced for the library’s disposal in 1845. We also have a good knowledge of the Macarthur family library at Camden Park—a rare example of a nineteenth-century country-house library that remains relatively intact. We know that a number of the committeemen later became subscribers to the expensive natural history publications, dedicated to Australian fauna, produced by John Gould (1804–1881) and these included Sir John Jamison, Charles Sturt (1795–1869), Edward Deas Thomson (1800–79), P.P. King, and Alexander and George Macleay (1809–91). George Macleay would later consolidate his own natural history library with the fine collection of books he inherited from his brother, William Sharp Macleay (1792–1865), in 1865.

Not only do we have some information about these early scientific book collections, but there is also clear evidence that many of the committee members had an interest in natural history that was closely tied to formalised scientific activity back in Britain. Six in ten of this first committee were fellows of at least one scientific society at ‘home’: Alexander Macleay and P.P. King were members of the Royal Society (Thomson’s father was also a Fellow); King, Jamison, Thompson, Sturt, Thomson and Macleay belonged to the Linnean Society of London; Macleay and Jamison had been associated with the Wernerian Natural History Society of Edinburgh and Jamison was also a member of the Société d’Histoire Naturelle of

---

4 Blackman (1845).
Mauritius. (See Appendix B for representatives on the Australian Museum committees and boards and their known institutional affiliations, between 1836 and 1853.) While Linnean Society Members P.P. King, Alexander Macleay, and J.V. Thompson had participated in meetings when living in, or visiting, London, observations sent by Jamison from Australia had also been presented by Macleay at a Linnean Society meeting in London in 1817.

The members of the inaugural Australian Museum committee were well educated, well connected, had power and money, and represented a combination of interests in zoology, botany and exploration. Individuals in early nineteenth-century Britain with this mix of social status and scientific interest were often known as ‘gentlemen of science’. In 1807, Isaac Disraeli suggested that the trick to differentiate between an English gentleman and a parvenu was to take a whiff of the candidate’s library—the strong smell of freshly-tanned Morocco leather, along with heavily gilded binding, were clear indications of an impostor. Yet it was less subtle observations that painted the true picture of a gentleman at this time: one who was male, was born into an established if not aristocratic family and one with sufficient independent income to dedicate most of his time to pursuing personal interests. Many such individuals committed their lives to scientific work and were no longer the polymath savants of the previous century but broadly specialised in discrete fields. Although amateurs in the traditional sense of not being economically dependent on their employment, these scientific gentlemen often

---


9 Macleay and Thompson were fellows of the Linnean Society while living simultaneously in London, and King exhibited specimens at Linnean Society meetings in 1825.

10 Macleay presented a letter he’d received from Jamison at a Linnean Society meeting, 18 March, 1817, in which Jamison gives ‘an account of a striking peculiarity in the ornithorinchus paradoxus of New Holland’. ‘Proceedings of Philosophical Societies: Linnean Society’, *Annals of Philosophy or, Magazine of Chemistry, Mineralogy, Mechanics, Natural History*, vol. 9, January to June, 1817, p. 325.

made contributions of the highest standard in their chosen area of expertise. Morrell and Thackray, in their influential study of the early development of the British Association for the Advancement of Science in the 1830s, identified the attributes common to many of these scientific gentlemen:

The group, our Gentlemen of Science, consisted primarily of liberal Anglicans who possessed secure status, income and property. Their familiar haunts were in metropolitan and academic centres. The Gentlemen of Science had predominant interests in geology and the physical sciences, and in an intellectual definition of vocation and calling. Their concerns lay not with professional advancement in any narrow financial sense, but rather with a religious and moral vision. To pursue knowledge of God’s created order in a rigorous and disciplined way was a proper calling for gentlemen in an age of evangelical seriousness.

This is a description of a group of secure and self-confident individuals and included those such as the geologist, Roderick Murchison (1792–1871)*, and the mathematician, Charles Babbage, amongst its number. Others, however, were always conscious of their tentative position in the social hierarchy: one example being the comparative anatomist, biologist and palaeontologist, Richard Owen (1804–92)*, who lacked independent wealth and gained his surgeon training through apprenticeships. Similarly, gentry in the provinces were keen to participate in organised scientific activity and were well represented by the growth of provincial scientific societies, but were often hampered by a lack of infrastructure and the pressing needs of business and professional life. By the 1840s, the ‘gentleman of science’ had become a slightly rarer beast—many of those pursuing a life in science lacked financial independence and needed an income in return for their scientific skills.

---

14 James Secord provides an interesting analysis of Owen’s insecure social position and the care with which he had to express views outside his field of expertise. Secord (2000), pp. 421–26.
If Alexander Macleay’s credentials as an Australian gentleman had relied solely on the worn physical state of his library, there is little doubt he would have passed with flying colours, as his books, while in storage, had been damaged by a deluge of summer rain only days after his arrival in Sydney.\textsuperscript{17} Similarly, Macleay’s certificate of election and candidature at the Royal Society, dated 1808, describes him as ‘a gentleman well informed in various branches of sciences, especially entomology’.\textsuperscript{18} Other ‘gentlemen’ of science and Fellows of the Royal Society responsible for the early management of the Australian Museum were P.P. King, George Witt (1804–1869)\textsuperscript{*} and Sir William Denison (1804–71)\textsuperscript{*}.

Most if not all the men on the Museum’s first committee were of sufficient social standing and wealth to be considered members of the local gentry, yet there was no opportunity for these individuals to ‘haunt’ metropolitan and academic centres in the New South Wales of 1836. Alexander Macleay, King, Thompson, Jamison and George Macleay all displayed interests in botany as well as varying experience in zoology. They committed considerable time and resources in the pursuit of their interests, but only a few, such as P.P. King and William Macarthur (1800–82)\textsuperscript{*}, published results of their activity while in Australia.\textsuperscript{19} On the other hand, George

\textsuperscript{17} ‘We have been deluged with rain ever since we have been here and much damage has it done to us—Poor Papa had his Books in the coach until Major Gouldburn [sic] could take his away in order to make room—Well about a week ago there was a dreadful flood and the rain poured into the coach house without anyone’s observing the circumstance the next morning the chest [sic] were found standing in a pool several inches high—still we comforted ourselves that the books were safe for they were in tin. Alas! Soon we were made aware of our misfortune on undoing the chest the tin in the most valuable cases was [...] soldered and the damage immense. I will not grieve you more about them however. I have been occupied in washing off the sandy stains from them ever since.’ Francis Macleay to William Sharp Macleay, Sydney, 31 January 1826. Frances Leonora Macleay et al., \textit{Fanny to William: The Letters of Frances Leonora Macleay 1812–1836}, [Sydney]: Historic Houses Trust of New South Wales; Macleay Museum, University of Sydney, 1993, p. 50.


\textsuperscript{19} Of those who did publish, Phillip Parker King’s major publications reported on his survey of the north and western coasts of Australia (London, 1827), his charting of the coast of South America (London, 1839), as well as writing articles for British journals and papers he printed privately on his own printing press. John Vaughan Thompson produced significant work prior to his arrival in New South Wales in \textit{Zoological Researches and Illustrations} (Cork, 1828–34), while an important paper on crustacea was published in the \textit{Edinburgh New Philosophical Transactions} in 1836. William Macarthur published works on horticulture, viticulture and the cellaring of wine.
Bennett—appointed by the committee as first secretary and curator of the Museum—was to earn considerable respect through his writings on natural history. Bennett’s start in the colony had echoes of Richard Owen’s less than prestigious roots: a medical practitioner and friend of Owen, Bennett had trouble making ends meet while employed at the Museum and supplemented his income in two additional government positions. He not only supervised the hanging of criminals and their subsequent dissection, but was also employed in the not uncomplementary role of Inspector of Abattoirs!

In 1841 Bennett resigned from the museum and resumed his medical practice though he continued to pursue his natural history interests, publish his research observations, serve on the Museum Board and take an active role in the Australian Museum Library. Though less financially secure than most of the museum committee, Bennett appears to claim his status as a ‘gentleman of science’ in a lithographic print made in the 1840s (Figure 1a). Dressed formally in a suit, a linen shirt, black cravat and high collar, Bennett stares directly at the viewer with a cape draped over his left shoulder and his right hand resting on a sizeable tome. The dark cape is reminiscent of an academic gown and the image professorial—a depiction of intellect and knowledge in a country not yet able to support its own university. The print of Bennett echoes the solid respectability portrayed in a portrait of astronomer, John Herschel, made in Britain at around the same time (Figure 1b).20

---

a) Dr George Bennett, 1840s.  
b) John Herschel, 1846.

**Figure 1. Two ‘Gentlemen of Science’**.

Despite some individuals in Sydney displaying traits in common with British gentlemen of science, scientific activity in New South Wales up until the 1850s has been viewed, until recently, as a predominantly passive function. The locals simply collected biological, botanical and other raw data to be shipped back ‘home’ to experts for processing, interpretation and publishing. This viewpoint sits well within the framework of George Basalla’s 1967 analysis of the diffusion of western science: a model in which science expanded from the imperial ‘centre’ (the metropolis) out to its colonial ‘periphery’. Basalla developed a three-phase developmental structure in which 1) raw scientific data was collected on the periphery and transported to the classifiers and theorisers in the metropolis 2) centre-trained intellectuals then began to work in the colonial environment, and 3) the final phase was marked by scientific independence at the periphery. This model was explored more deeply from the Australian perspective in the early 1980s with an emphasis placed on the diversity and complexity of the periphery.

---


This approach has since been taken further by those such as Jim Endersby who has looked at the complex network of players involved in the early development of Sydney's Botanic Gardens through the bartering of plants, and questioned the apparent simplicity of the one-way power relationship between the ‘centre’ and the ‘periphery’.²⁴

Another measure of scientific development in Australia has been the establishment and dissemination of organised societies. The foundation of the Philosophical Society of Australasia in 1821 is seen as the first faltering step towards formalising science in Australia and will be discussed in more detail in relation to the Macleays and their later influence. The society was modelled on the generalist provincial philosophical societies such as the Manchester Literary and Philosophical Society, rather than the more specialised societies of London.²⁵ Yet the strength of the links between the metropolitan societies and former members working in the periphery may have been underestimated, and perhaps these ‘clubs’ were of greater importance to those more scientifically-inclined than the few Sydney societies that came and went during the 1820s and 1840s. Most of these local societies such as the Agricultural Society of New South Wales (1822–36), Australian Society to Promote the Growth and Consumption of Colonial Produce and Manufactures (1830–36), and Australian Floral and Horticulture Society (1836–48),²⁶ were focussed on the improvement of the colony’s production rather than the concerns of a gentleman’s science club. Inevitably, all these societies and others, such as the Australian Subscription Library, had numerous members in common in a colony in

⁴ ²¹ ²² ²³ ²⁴ ²⁵ ²⁶

²⁴ By employing Susan Leigh Star and James R. Griesemer’s method of analysing the plants being traded as ‘boundary objects’—objects in which ‘their value and meaning are constantly “translated” and reinterpreted as they move between historical actors with different agendas’, Endersby concluded that the Kew Garden’s empire was in effect ‘founded by the colonies, not the centre’. Jim Endersby, ‘A Garden Enclosed: Botanical Barter in Sydney, 1818–39’, The British Journal for the History of Science, vol. 33, 2000, pp. 313–34.


²⁶ Branagan (1972), p. 128.
which it has been estimated that there were only 300 to 400 ‘educated males in the
upper ranks’ at this time.\textsuperscript{27}

There is a general perception that New South Wales lacked the physical and
intellectual infrastructure as well as sustained leadership to establish a serious
scientific community until the arrival of Governor William Denison in the 1850s.\textsuperscript{28}
This lacklustre performance, compared to the much higher level of organised
scientific activity in Van Diemen’s Land during the same period, is undeniable.
Indeed, there is considerable evidence that the most accomplished scientific
individuals in New South Wales, like P.P. King, were often too busy managing their
farms and businesses to offer a sustained contribution,\textsuperscript{29} and this is confirmed in
observations made by Ludwig Leichhardt (1813–48?)* in 1846:

\begin{quote}
We have been bussy \textit{sic} to form a sort of society in Sydney, but I am afraid, that
we shall not yet succeed; there are many people here who pay attention to
natural science, but their endeavours are isolated and they are little willing to
combine ... Most of the gentlemen are occupied with their business, which allows
them little time for pursuits the advantage of which public opinion is not yet
prepared freely to acknowledge.\textsuperscript{30}
\end{quote}

Others, like Rev. W.B. Clarke (1798–1878)*, frequently expressed their frustration
at feeling trapped in an intellectual backwater.\textsuperscript{31} It was not until Denison’s
formation in 1856 of the Philosophical Society of New South Wales (formerly the
Australian Society and later the Royal Society) that a scientific society was
established for the long haul. However, as in Jim Endersby’s examination of the
development of a scientific institution through the reception of objects such as

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{27} S. Jack (1988), p. 57.
\item \textsuperscript{28} Finney (1993), p. 31.
\item \textsuperscript{29} The same problem faced the English provincial gentry, and it seems King gave similar excuses
whether he was in Australia or England. Responding to an invitation to the inaugural meeting of
the British Association for the Advancement of Science to be held in York, he wrote that ‘York
was too far for a person who has other occupations’. Cited in J. Morrell and A. Thackray (1981),
p. 75, n. 222.
\item \textsuperscript{30} Ludwig Leichhardt to Gaetano Durando, Sydney, 27 September 1846, M. Aurousseau (ed.), \textit{The
Letters of F.W. Ludwig Leichhardt}, The Hakluyt Society, London: Cambridge University Press,
\item \textsuperscript{31} Clarke published an article, ‘The Intellectual Barrenness of New South Wales’, \textit{SMH}, 12 March
1847, p.2.
\end{itemize}
\end{footnotesize}
plants, I suggest that it may be worth looking beyond the absence of a sustained formalised scientific infrastructure in New South Wales to something less tangible. There may be particular value in identifying a specific group of individuals, such as those associated with the management of the Australian Museum up until the late 1840s. A prosopographic analysis of these individuals identifies common factors, such as membership of London scientific societies, in what may be a relatively disparate group. We may then have opened a space in which the relationships this group had with available scientific literature, its suppliers and fellow readers are not only revealed but provide clues as to the way in which this literature was applied in local scientific activity.

The Australian Museum Circle, 1836–1848

In his study of nineteenth-century science and scientific associations on the Australian east coast, Michael Hoare identifies what he calls the ‘Macleay Circle’—a group proud ‘of their position as old Linneans’. Individuals associated with Alexander Macleay, his sons, William Sharp and George, and his nephew William John* included P.P. King, J.V. Thompson, William and James Macarthur (1798–1867), and Edward Deas Thomson. Most of these figures I have already identified as members of the Australian Museum’s first Committee of Superintendence and Hoare based his observation, in part, on John Fletcher’s description of some of these original players:

George Macleay, being then young, was one of the few members of the Committee of 1836, who was not a Fellow of the Linnean Society. It is very interesting to note how punctilious Alexander Macleay was in enlisting the cooperation of all the available old ‘Linneans’—to use an expression once employed by Mr Bentham—in carrying out scientific enterprise.

Hoare implicitly places the home of these ‘Linneans’ at the Museum and Botanic Gardens in the 1830s and ’40s—a club to which applicants such as the explorers

33 Fletcher (1920), p. 631.
Ludwig Leichhardt and John Lhotsky were barred. At no time, however, does Hoare suggest that the Museum Committee was acting as a society in any form.

Alexander Macleay chaired the Australian Museum Committee from its founding in 1836 until his death in 1848. Over this period he was joined by 21 committeemen, nine of whom served on the committee for two or fewer years. While some, such as Reverend George Edward Turner (1810–1869)* and Reverend Robert Lethbridge King (1823–97)* would go on to make a considerable contribution to the administration of the museum in later decades, others, such as Sir John Jamison and Charles Sturt did not serve beyond 1836. One might consider the number of years served on the committee during the Alexander Macleay period as the best measure of commitment to the institution, but given the poor attendance at meetings by many of the members this would be a flawed approach! Instead, I have identified traits in the lives of a group of individuals that indicate a common history, purpose and a set of skills that provided a framework to support their scientific interests. In their use of prosopography to study science history, Steven Shapin and Arnold Thackray looked beyond the scientific involvement of those in the upper strata of society and scientific elites to identify those on the margins. Morrell and Thackray, on the other hand, used this method to limit the dramatis personae in their study of the leaders of the British Association for the Advancement of Science by identifying a limited set of common factors among these individuals. While acknowledging the importance of informal scientific observation from settlers outside Sydney, I have followed Morrell and Thackray in my analysis of the composition of the Australian Museum Committee, 1836–48,

---

35 Meetings were not only irregularly held, but ‘at some meetings only two or three attended but Alexander was a regular attendee.’ Derelie Ann Evely, ‘Alexander Macleay and his Contribution to Colonial New South Wales’, Ph.D. dissertation, Dept. of History, Faculty of Arts, University of Sydney, 2003.
In terms of length of service, profession, education, birthplace, membership of British scientific societies and the publication of scientific papers. This will provide a new perspective on a group of individuals who are known to have played a role in influencing scientific activity in New South Wales during this period and, later, the development of the AML collection, which, reciprocally, influenced further scientific activity.

In Table 1, I have identified the nine committee members whom I consider key players at the Australian Museum during this time. Eight of these individuals served on the committee for five or more years and at least six participated in one or more British scientific societies during this period. Five members of the committee published a combined total of 88 scientific papers in Britain up until 1848, in addition to a number of well-known monographs. It is noteworthy that with the exception of one Australian-born member, William Macarthur, the remainder were almost equally split between those born in England and those born in Scotland or of Scottish parents. This reflected not only the chairman’s Scottish ancestry, but perhaps also the benefits of a Scottish education which encouraged the scientific interests even of the lower classes.

39 By 1848, William Sharp Macleay had published his two influential monographs: *Horae Entomologicae, or, Essays on the Annulose Animals*, London: Printed for S. Bagster, 1819–1821, and *Annulosa Javanica, or, An Attempt to Illustrate the Natural Affinities and Analogies of the Insects Collected in Java by Thomas Horsfield*, London: Kingsbury, Parbury and Allen, 1825. Phillip Parker King had written works such as *Narrative of a Survey of the Intertropical and Western Coasts of Australia: Performed Between the Years 1818 and 1822*, London: John Murray, 1827; *A Voyage to Torres Strait in Search of the Survivors of the Ship Charles Eaton*, Sydney: E. H. Statham, 1837; and *Narrative of the Surveying Voyages of His Majesty’s Ships Adventure and Beagle Between the Years 1826 and 1836*, London: Henry Colburn, 1839. John Vaughan Thompson was known for his *Catalogue of Plants Growing in the Vicinity of Berwick Upon Tweed, etc.*, London, 1807; and most importantly his *Zoological Researches, and Illustrations: Or Natural History of Nondescript or Imperfectly Known Animals, In a Series of Memoirs*, Cork, [1828–34]. William Macarthur had written *Catalogue of Plants Cultivated at Camden*, 1843, [Sydney?: s.n., 1843?]; *Letters on the Culture of the Vine, Fermentation, and the Management of Wine in the Cellar*, Sydney: Statham and Forster, 1844; and *Catalogue of Plants Cultivated at Camden*, 1845, [Sydney?: s.n., 1845?].

Table 1. Key AM Committee Members and Associates, 1836–48

<table>
<thead>
<tr>
<th>Committee Members</th>
<th>Years</th>
<th>Profession</th>
<th>Education</th>
<th>Birthplace</th>
<th>British Scientific Societies</th>
<th>Publications¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rev. W.B Clarke</td>
<td>9</td>
<td>Clergyman</td>
<td>Cambridge University</td>
<td>England</td>
<td>Geol. Soc.</td>
<td>30²</td>
</tr>
<tr>
<td>Alexander Macleay</td>
<td>13 as Chair</td>
<td>Public Servant/ Parliamentarian</td>
<td>Aberdeen University?</td>
<td>Scotland</td>
<td>Linn. Soc.; Roy. Soc</td>
<td>0³</td>
</tr>
<tr>
<td>George Macleay</td>
<td>13</td>
<td>Pastoralist</td>
<td>Westminster School</td>
<td>England</td>
<td>Linn. Soc. (1860)</td>
<td>0</td>
</tr>
<tr>
<td>William Macarthur</td>
<td>5</td>
<td>Landowner</td>
<td>Grove Hall Academy, London</td>
<td>Parramatta</td>
<td>None?</td>
<td>0</td>
</tr>
<tr>
<td>Charles Nicholson</td>
<td>9</td>
<td>Physician/ Scholar</td>
<td>Edinburgh University</td>
<td>England</td>
<td>?</td>
<td>0</td>
</tr>
<tr>
<td>John Vaughan Thompson</td>
<td>3</td>
<td>Physician/ Public Servant</td>
<td>Edinburgh University</td>
<td>Scotland</td>
<td>Linn. Soc.</td>
<td>19</td>
</tr>
<tr>
<td>Edward Deas Thomson</td>
<td>13</td>
<td>Public Servant</td>
<td>Harrow, College at Caen</td>
<td>Scotland</td>
<td>Linn. Soc.</td>
<td>0</td>
</tr>
<tr>
<td>AM Associates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>George Bennett</td>
<td>13</td>
<td>Physician/ AM Curator</td>
<td>Hunterian School of Medicine</td>
<td>England</td>
<td>Linn. Soc.; Zool. Soc.</td>
<td>13</td>
</tr>
</tbody>
</table>

3. Alexander Macleay contributed to scientific literature through his editorship of Linnean Society publications and was frequently asked to provide comment or taxonomic assistance on works such as William Kirby and William Spence’s *An Introduction to Entomology; or, Elements of the Natural History of Insects* (1815) and for advice from Thomas Lewin during the course of publishing his brother John’s *Prodromus Entomology: Natural History of Lepidopterous Insects of New South Wales* (1805).
members of what I have called the ‘Australian Museum Circle’ (AM Circle)—Clarke, W.S. Macleay, Charles Nicholson (1808–1903)* and Thompson—attended university, with two at Cambridge and two at Edinburgh. Details of Alexander Macleay’s education are unknown, though it is possible he may have attended some university lectures at Aberdeen.\footnote{Evely (2003), p. 19.} Attendance at Trinity College, Cambridge, was a common factor used to identify many of Morrell and Thackray’s ‘Gentlemen of Science’ and helps place William Macley and, to a lesser extent, W.B. Clarke (who attended Jesus College, Cambridge) within this group.\footnote{J. Morrell and A. Thackray, p. 26.} King received a naval education, George Macleay attended Westminster School, while Thomson went to Harrow before attending university in France. These were undoubtedly some of the best educated members of New South Wales society yet their professions reflect the provincial nature of the young colony, with three of the members occupied in farming and agriculture, three employed by the government, two gentleman scholars and one clergyman. The small representation of gentleman scholars amongst the elite is of little surprise in a society that was materially, rather than culturally, focussed and where stories of the immigrant scholar forced to sell his books to survive were not uncommon.\footnote{Colonist, 25 Feb. 1836 in George Nadel, Australia’s Colonial Culture: Ideas, Men and Institutions in Mid-Nineteenth Century Eastern Australia, Cambridge, Mass.: Harvard University Press, 1957, p. 43.}

Given the limited activity of the Australian Museum and its committee up until the early 1850s, I have also identified two associates—George Bennett and John Gould—whose close contact with the Museum and its committee reflects not only the local study of Australian zoology, but also the authorship, use, and dissemination of scientific literature within the group. Both these individuals and their relationship with Museum activity will be discussed further in this and later chapters.
A Sydney Branch of the Linnean Society?

When Alexander Macleay (Figure 2) first stepped onto Australian soil on 3 January 1826, he did so not only as the new Colonial Secretary of New South Wales but also as one who had played a leading role in the Linnean Society of London for over 27 years. At the Linnean Society meeting at which Macleay had been graciously farewelled on 21 June 1825, the membership was clearly excited by the potential for increased access to Australia’s natural history:

The evils attendant on separation will be softened down on both sides by the continued intercourse which science thus fortunately holds out between us; and we shall be the less estranged, in being still participators in his eminent zeal for our common pursuit ... while investigating a collection, which has already received, and which it is expected will continue to receive, so much benefit from Mr. MacLeay ... we express our sincere wishes for a successful accomplishment of the objects of his mission, and a happy return to his country and this Society.

Despite his trepidation at hauling his family halfway across the world to a convict enclave, Macleay cannot but have felt excited as he viewed for the first time the fauna and flora he had avidly collected and studied from a distance over many years. Arriving as he did with the acquisitive expectations of the Society on his shoulders, there is little doubt that Macleay was the closest thing to an embodiment of the Linnean Society in Australia at this time.

Born in 1767 in Ross-shire, Scotland, Alexander was the son of the Provost of Wick and deputy-lieutenant of Caithness. Apparently classically educated, Alexander moved to London in 1788 and formed a business partnership with William Sharp, a London wine merchant. In 1795 he was appointed chief clerk in the prisoner-of-war section of the transport office, was promoted to head of the correspondence department in 1797 and became secretary to the Board from 1807. An able administrator, his skills were soon recognized by the Linnean Society where he was appointed Secretary in 1798. Alexander had been made a Fellow of the Society four years earlier, apparently eager to participate in its natural history activities.

44 N.A. Vigors and Thomas Horsfield, ‘A Description of the Australian Birds in the Collection of the Linnean Society; with an Attempt at Arranging them According to their Natural Affinities’, *Transactions of the Linnean Society*, vol. 15, 1827, pp. 176–77.
Established by James Smith in 1788, following his purchase of the specimens and library of the naturalist Carolus Linnaeus, the Linnean Society was in the unique position of using Linnaeus’s collection as the basis for comparing new plant and animal discoveries presented to the Society. For those who were followers of the increasingly influential Linnean classificatory system, the plant (and later the animal world) was arranged in a system of descending hierarchical categories from the top level of kingdom down to the level of species, and these followers employed Linnaeus’s binomial naming system.

Figure 2. Alexander Macleay.

Alexander Macleay’s passion was for entomology and we know that he was actively collecting and classifying insects from at least the turn of the nineteenth century.\textsuperscript{45} A gentleman collector such as Alexander might aim to collect as many examples of an order, family or genus of insects in which he was interested.\textsuperscript{46} Like a keen stamp collector, Alexander obtained these specimens from all around the world.\textsuperscript{45} Evely (2003), p. 259, notes the first indirect reference to Alexander’s specimen collecting. \textsuperscript{46} William Swainson divides up private collections into partial collections, typical collections, local or geographic collections and economic collections. Alexander’s collection would be considered a typical collection consisting ‘only of single specimens or examples of forms, either characteristic of families or of genera’. William Swainson, Taxidermy: Bibliography and Biography, The Cabinet Cyclopaedia, Natural history, [v. 124], London: Printed for Longman, Orme, Brown, Green & Longmans, 1840, pp. 78–81.
world by collecting them locally himself, paying collectors, purchasing collections at auction and exchanging his duplicate specimens for desiderata. Having collected specimens, some previously unknown, Alexander would have compared them with specimens in his own or the Linnean Society collection and used taxonomic literature in his library to help classify them.

In addition to improving his personal collection, Alexander played a significant role in developing a rich collection of Australian specimens at the Linnean Society. Prior to his departure for Australia, his donations of bird skins and quadrupeds not previously held in the Society’s collection were recorded in the *Transactions of the Linnean Society*, adding to an already sizeable collection that had included a small contribution from future AM committee member, John Jamison. In early 1825, P.P. King exhibited specimens at a meeting of the Zoological Club of the Linnean Society that he had collected on his voyages around northwest Australia between 1817 and 1822. Of these, he donated 14 New Holland bird skins and in a subsequent meeting participated in a discussion about the classification of New Holland birds. Present at these meetings were Alexander and William Sharp Macleay, both of whom would have been interested in King’s first-hand description of the Australian countryside and its natural history.

What then should we make of such Linnean Fellows who continued to make donations after their move to New South Wales? To what degree did these individuals feel they had moved to the scientific periphery? Between 1827 and 1847, specimens were donated from New South Wales by Alexander Macleay (reported in the Linnean Society Transactions of 1827, 1833, 1837 and 1846–7),

---


48 Jamison donated two birds in the early 1820s, ‘Donations to the Museum of the Linnean Society’, *Transactions of the Linnean Society of London*, vol.14, 1825, p. 601.


50 ibid., p. 603.
John Jamison (1827), Edward Deas Thomson (1833), George Bennett (1833), John Vaughan Thompson (1841), P.P. King (1846–7) and the Committee of the Australian Museum (1841). One could argue that little had changed in the behaviour of these committeemen donating specimens to the Society. For most, their contribution to zoological knowledge was little more than providing raw materials, whether based in London or Sydney. It would seem that despite their physical separation, there was continuity in their relationship with the metropolis and it is therefore possible that they perceived themselves as an outpost of the Linnean Society.51

The tradition of British societies, such as the Linnean Society, making their specimen collections available through a museum to their members or to a broader audience was well established by the time Alexander Macleay arrived in Australia.52 The role of a museum within a natural history society structure was familiar to Alexander through his involvement with the Linnean Society collections and was one he hoped to apply in an Australian context. On 16 September 1826, Alexander responded to a request from Lord Bathurst's Under Secretary R.W. Hay for the supply of 'many objects of Curiosity to be obtained in New South Wales' for the use of British naturalists.53 Complaining of the lack of support in the colony for the natural sciences, Macleay proposed the establishment of a society 'for the pursuit of such subjects' and that such a society would form a 'Museum of Natural Productions of the Colony, so that strangers may see all at once'.54 He advised that

51 It is noticeable that the only Linnean associated with the Australian Museum who did not appear to donate any specimens to the Society was William Sharp Macleay. He was the only member of the group who made a significant contribution to classificatory theory in the 1820s and was perhaps more focussed on theorising than providing the 'raw data'.


the best specimens collected would be retained by the Museum, while duplicates would be sent to British institutions, starting with the Linnean Society Museum 'as it already possesses the most perfect collection'.

Lord Bathurst responded by providing funds of £200 per annum for the ‘formation of a Publick Museum at New South Wales, where it is stated that many rare and curious specimens of Natural History are to be procured’. While Macleay was not given funding for a scientific society, he was given a museum and perhaps an institution around which a society, even if only an informal association of common interests, could be formed.

While it was always intended that Australian material would be despatched to London by the Museum, scientific gentlemen like George Bennett, who sent a constant stream of specimens for most of his life, have often been cited as examples of the colony’s lack of independence on the periphery. Bennett has even been criticised for undermining the quality of the Australian Museum collections in these early years.

Yet Bennett’s actions were very much those of a ‘team player’ and one still relatively junior to his associates in London. William Sharp Macleay, on the other hand, played a different game: well-known as a theoriser, Macleay appears to have had little doubt that the metropolis had travelled with him when he settled in Sydney in 1839. On numerous occasions he stated that scientists of his stature should police local zoological classifications while also keeping track of the latest nomenclature in London:

> This of itself is of no small importance, as the Colonial Museum is named from my Collections and of course the insects will be known to the Australian Collectors by the names in the Colonial Museum, just as the British Museum serves or ought to serve as a model for the nomenclature of British Insects.

55 ibid.
57 ibid., pp. 94-95.
It was also an argument he used for fossils in his correspondence with W.B. Clarke:

I will not allow that any observer resident in England ... can be entitled to class our Australian Fossils. In my opinion the right way of proceeding is for the English geologists to class their fossils according to their position in the English strata, and for you and other Australian geologists to class the Australian fossils according to their position in the New Holland Strata and then finally compare the results.\footnote{W.S. Macleay to W.B. Clarke, 31 May 1844, Elizabeth Bay House, Moyal (2003), p. 155.}

There is no doubt that there were individuals within the AM Circle who, while respectful, were not subservient to a distant metropolis. Even if these individuals had significant collections of their own, the establishment of a museum collection was likely to attract new and unknown specimens from around the colony and provide a focus for networking and discussion. The quality of that discussion, however, would be highly dependent on the quality of the scientific literature available.

One of the benefits for the members of metropolitan scientific societies, such as the Linnean Society, was access to publications. Prior to this, those isolated individuals interested in science were limited to communicating ideas through correspondence or bearing the cost of publishing works themselves or by subscription. Similarly, access to literature was often hampered by its excessive cost and inaccessibility. In 1790, only two years after the establishment of the Linnean Society, the first bookcase was ordered and donations began to flow, chiefly from Sir Joseph Banks and his librarian, Jonas Dryander.\footnote{A.T. Gage and Linnean Society of London, A History of the Linnean Society of London, London: The Linnean Society, 1938, p. 14.} Alexander Macleay was Honorary Librarian from 1796 until his appointment as Secretary in 1798, and was one of a number of the AM Circle members who had made book donations to the Society. While serving as Secretary, Alexander donated six titles to the Society with publications ranging from Discoridis’ “De Medicinali Materia Libri Sex (1552)” to Latreille’s “Genera Crustaceorum et Insectorum (1806–09), some of which he held in his own library.\footnote{C. Linnaei, Fauna Suecica, Holmiae, 1746 was listed as a donation in Transactions of the Linnean Society of London, vol. 6, 1802, p. 396 and in the Macleay library auction catalogue, lot 164, in 1798.} W.S. Macleay, J.V. Thompson and George

\references
\footnote{W.S. Macleay to W.B. Clarke, 31 May 1844, Elizabeth Bay House, Moyal (2003), p. 155.}
\footnote{C. Linnaei, Fauna Suecica, Holmiae, 1746 was listed as a donation in Transactions of the Linnean Society of London, vol. 6, 1802, p. 396 and in the Macleay library auction catalogue, lot 164, in 1798.}
Bennett all made donations of their own publications to the Linnean Society before coming to Australia and serving on the Museum Committee, but made few donations subsequently. The main exception was the donation of the Australian Museum’s first catalogue, *A Catalogue of the Specimens of Natural History and Miscellaneous Curiosities Deposited in the Australian Museum* (1837),\(^{62}\) made by the ‘Committee of the Australian Museum’ and a gift very much in the tradition of publication exchanges where societies swapped their catalogues and periodicals for the benefit of shared information.

With much the same intention, John Gould delivered by hand to P.P. King in 1839, as a gift for the Australian Museum, a catalogue of the Zoological Society of London.\(^{63}\) King appears to have been an energising force on the Museum committee and though living at his property, Dunheved, near St. Mary’s, his relative isolation did not prevent contact with committee members and like-minded visitors such as Charles Darwin\(^{64}\) and Captain Owen Stanley\(^{65}\) in the mid-to late 1830s. The contribution of King to a scientific culture in Sydney and any seminal scientific society was diminished by his appointment as commissioner to the Australian Agricultural Company in 1839 and his move to Port Stephens for the next decade. W.S. Macleay welcomed King’s return to Sydney in c.1852 and it is clear that the Museum committee had been relatively inactive during the 1840s in his absence:

---

the first day’s sale; C.P. Thunberg, *Dissertationes Academicae Upsalae Habitae sub Praesidio Carol. Petri Thunberg...*, Gottingae, 1799–1801, listed as a donation in *Transactions of the Linnean Society of London*, vol. 7, 1804, p. 315, appearing as lot 61 in the second day of the Macleay sale.

\(^{62}\) The Linnean Society of London, ‘Donors to the Library of the Linnean Society’, *Transactions of the Linnean Society of London*, vol. 18, 1841, p. 718.


\(^{65}\) Stanley, later commander of the HMS *Rattlesnake*’s surveying expedition around the Great Barrier Reef and Torres Strait, made a watercolour of Dunheved while visiting in 1838. Owen Stanley, ‘Capt. King’s farm Dunheved’, *Voyage of H.M.S. Britomart from 1837 to 1843*, ML PXC 279, vol. 1, f.19.
It has often struck me that we want a Scientific Club here for the purpose of recording observations on Australian natural history which in the actual state of things are every day made only to be lost forever. An Assembly of the genus Amplis (like Dr. Douglass’ Phil. Society), where those chatter the most who know the least of the subject they talk about, is of all assemblages of human beings one of the most odious. But a Society of Working bees, who would talk only on subjects they had read up and who would record their observations and the inferences they might draw from them, would I think do a great good to the general cause of science. And now that Capt. King is come into our neighbourhood the thing seems more feasible since without him the thing would be impossible.66

Despite the obstacles of minimal funding, insufficient numbers of educated gentlemen interested in natural history, personal antipathy between some of the key players, and the struggle to find spare time among those who were interested, there is some evidence of a group of individuals, led by Alexander Macleay, who had been actively involved in scientific societies and their traditions prior to their arrival in Australia. There is evidence of Alexander’s aspiration for a local society like the Linnean Society in London, but the reality of his workload and the lack of interest made this impossible to achieve. However, in examining the individuals I have identified, we can see the hint of a ‘surrogate society’ that not only had a museum with a small collection but also a group of educated, published members who continued to engage with the metropolis, if in a relatively limited way. It would have been impossible for the AM Circle to make any scientific contribution beyond data collecting without sufficient access to literature. Each member of the Circle had some literature in his personal library, but, with the possible exception of W.S. Macleay, none had a collection approaching the quality of the Alexander Macleay library.

67 'My various collections and books have arrived out here safe and without the slightest injury, so that I will be able to work with greater facility than I could formerly when in Spanish America [where he did not have access to his library]’, W.S. Macleay to F.W. Hope, 1 July 1839, cited in Holland (1996), p. 120.
The Alexander Macleay Library

When Alexander Macleay departed for Australia in 1825 he had served as Secretary of the Linnean Society for a generation and had been Fellow of the Royal Society for almost twenty years. Despite being at the centre of scientific activity in London, he never published a catalogue of his specimen collection or left his mark in the form of any other literature. He was, however, active as editor of the Linnean Society's publications and authors working in entomology such as William Kirby, William Spence, Thomas Lewin and Edward Donovan consulted Macleay for advice and accessed his specimen collection for their research. Macleay's library was first mentioned publicly in Kirby and Spence's influential work, *An Introduction to Entomology; or, Elements of the Natural History of Insects*, published in 1815:

> TO ALEXANDER MACLEAY, ESQ. they [the authors] are under particular obligations, for the warm interest he has all along taken in the work, the judicious advice he has on many occasions given, the free access in which he has indulged the authors to his unrivalled cabinet and well-stored library, and the numerous other attentions and accommodations by which he has materially assisted them in its progress.68

It is likely that Alexander's son, William Sharp, also made significant use of his father's library. Born in 1792, he followed in his father's footsteps as an impassioned entomologist, but unlike his father was also renowned as a theorist. After studying in France he returned to England and, using his father's specimen collection, he wrote his defining work *Horae Entomologicae, or, Essays on the Annulose Animals*, published in two parts in 1819 and 1821. It was in this publication that William articulated his Quinary system—a 'natural system' of zoological classification formulated to reconcile the master plan of the 'Creator' with the obvious complexities evident in the new forms of species being discovered all around the world.69 Macleay's system of dividing nature into circles

---


of five elements based on ‘affinities’ and ‘analogies’ was taken up by fellow naturalist William Swainson (1789–1855)* with a vigour that was to link the names of the two men permanently (see Chapter Three for further discussion of William Swainson and the AML’s purchase of his library).70

William Sharp Macleay lost access to both his father’s and his own library in 1825 when he left England to take up an appointment as commissioner of arbitration in Cuba. A couple of months prior to William’s move, Alexander too had decided to take up his offer of employment in Australia. Struggling to support his wife and large family on a pension granted following the abolition of the transport office in 1817, Alexander had accepted the position of New South Wales Colonial Secretary. He took with him one of Europe’s finest collections of insects held by any individual and a library well stocked with the classics of scientific literature. Derelie Ann Evely considers it intriguing that, rather than auction off parts of his collections to raise much needed money, or at least take up the offer of storing his insect cabinets at the Linnean Society, Alexander chose to take everything with him.71 The fate of many a library was to be sold off or at least minimised before the trek to the colonies and Alexander’s actions suggests his desire to ensure he had all the tools he needed to explore new species yet to be discovered. The expectation of new discoveries among his many scientific companions is characterised in a note from William Kirby on the eve of Alexander’s departure:

Your appointment will form a new Era in the natural History of New Holland, & the production of that great country, & the islands of those seas will now be more fully known.72

Other than auction, the second greatest threat to the library of one travelling to the antipodes was physical damage to the collection and, as we have already seen, Alexander’s library survived its journey across the seas only to be doused by a

---

72 ibid, p. 289. Kirby to Macleay, January 1825, Linnean Society, London.
Sydney summer storm not long after its arrival. The library was not to find a room befitting its significance for another thirteen years, when in 1839 the Macleays finally moved into the magnificent Greek revival villa, Elizabeth Bay House.

While Macleay’s library was recognised as an unrivalled book collection by his contemporaries in New South Wales,73 the question remains as to how significant it was as a scientific library (see Appendix C for a short title listing of mainly scientific works). We know that it contained over 4000 volumes when it was auctioned off in 1845 and that many of these works were staple scientific texts published well before Alexander’s arrival in the colony in 1826.74 These included significant titles by Linneaus, Johann C. Fabricius, Georges Cuvier, the Comte de Buffon, John Latham, and George Shaw among many others. Conveniently, the Linnean Society published a catalogue of its library in 1827 and a comparison with Macleay’s library is illuminating. In the Macleay library auction catalogue, 190 titles were classified as ‘zoology’, and of these, 48 titles (25%) were duplicated in the Linnean Society library. Given the Linnean Society’s botanical interests, it is unsurprising that there was a greater correlation between the libraries in terms of botanical titles: 74 of Macleay’s titles were listed as ‘botany’ and 33 of these (45%), were held by the Linnean Society in the mid 1820s. While the relatively high representation of common material between the two libraries, particularly in the case of botany, is significant, the quality of Macleay’s less specialised collection is amplified when considering the material not held by the Linnean Society at this time. Such items in Macleay’s library included Buffon’s natural history (in twenty volumes); Thomas Horsfield’s* Zoological Researches in Java (1824); Francis

73 In the year of the founding of the Committee of Superintendence at the Museum, John Lhotsky wrote of the libraries of Alexander Macleay and the Australian College in No. 5 of Illustrations of the Present State and Future Prospects of the Colony of New South Wales (1836), p. 63: ‘The Colony may consider itself fortunate in possessing at this early stage of its existence two libraries of such extent as the above, besides that of the Colonial Secretary’s, Mr McLeay. The latter most probably from its number and costly works, is unrivalled in any other colony’. Quoted in Elizabeth Anne Webby, ‘Literature and the Reading Public in Australia 1800–1850: A Study of the Growth and Differentiation of a Colonial Literary Culture During the Earlier Nineteenth Century’, unpublished Ph.D., University of Sydney, 1971, p. 322.

74 As listed in Blackman (1845). While it seems that most of Alexander’s library was included in the catalogue, W.S Macleay kept some of the volumes along with furniture to the value of £500 prior to the auction (see reference in footnote 86).
Willughby’s *Ornithologia* (1676); John Lewin’s *Birds of New Holland* (1808); and two copies of Mariam Sibyllam Merian’s *Metamorphosis Insectorum Surinamensium* (1705). Macleay’s library contained a mix of both new literature and rare natural history ‘treasures’ not yet held by the Linnean Society.

In Australia, there is also some record of scientific literature held by individuals in New South Wales in the 1820s. This includes material in the libraries of Governor Brisbane, John Oxley, and Robert Townson amongst others. Oxley was one of a group of individuals whose libraries were famously listed in the combined catalogue of the short-lived Philosophical Society of Australasia—a hand-written document presented to the Society by Barron Field in 1822. Presumed lost, this holy grail of Australian library catalogues would have provided a fascinating insight into these early collections of which only the sale lists of John Oxley and Henry Grattan Douglass have survived.

These sale lists suggest that Macleay’s taxonomic literature alone far outranked anything held in the Philosophical Society’s library, yet Macleay admired the sharing of book resources as advocated by the Society. As we have seen, the Museum’s first meeting of the committee of superintendence in 1836 resolved to create a listing of the combined libraries of the committee members. It is likely that the idea originated from P.P. King, who had been a member of the Philosophical Society; but it was Alexander, who, at the laying of the foundation stone of the new

---


78 The society’s tenth regulation stipulated that: ‘Every member shall furnish the Secretary with an alphabetical catalogue of his library, to be digested into one catalogue for the reference of all the members’. Australasias, Philosophical Society of, ‘A Copy of the Complete Minutes of the Philosophical Society of Australasia, 1821-1822’, *Journal and Proceedings of the Royal Society of New South Wales*, vol. 55, 1921, Appendix, p. lxxix.

Australian Subscription Library in 1843, expressed his admiration for the Philosophical Society’s shared catalogue:

Each possessing a considerable collection of books, resolved to make them generally useful as possible, and with this view they had a general catalogue or a kind of conspectus made out of the whole, and by a means of an initial against the title of each book, it showed in whose collection such a book was to be found. The same thing may have been done in other places, but I confess it was new to me, and pleased me very much.  

There is no evidence that the Australian Museum Committee ever created such a catalogue; similarly, I have not found any record of Macleay lending volumes from his library. This may be the result, however, of insufficient documentary evidence as Macleay emphasised his preparedness to share his collection later in his speech:

One of the great uses of an establishment of this kind [Australian Subscription Library] is derived from its containing for the purpose of reference, works of science, which the convenience of individuals may not allow them to purchase for their private libraries, and it is in works of science, perhaps that we are most poor. Indeed the library is more particularly deficient in works on Natural History, which are for the most part very costly; but I believe it is pretty generally understood that my collection of books on Natural History is tolerably extensive, and that my library is accessible to all my friends who study that science.

Ludwig Leichhardt had also complained about the poor range of natural history texts available in the Subscription Library a year earlier, but given ‘old Mr Macleay’s’ rejection of Leichhardt’s application to head the Botanic Gardens in the same year, Leichhardt was not part of the clique who had access to Macleay’s private library. Dr George Bennett’s struggle with late or missing scientific subscriptions in the late 1830s suggests that, despite his being curator and secretary of the Australian Museum, it is doubtful that he had access to the Macleay family’s books. This doubt is strengthened by a letter written by W.S. Macleay to

---

80 The Australian Subscription Library’, *SMH*, 15 February 1843, p. 3.
81 ibid.
F.W. Hope in 1842: ‘The Revd Mr Clarke the well known geologist is now the Curator of our Museum instead of Bennet [sic] who was an idle dog that I was glad to get rid of’.  

When New South Wales was hit by Depression in the early 1840s, it soon mattered little who was given access to Alexander's library. Macleay's finances were in a mess and with debts of more than £42,000, he had to be bailed out by his son, William Sharp, who had settled in New South Wales in 1839. William took possession of Elizabeth Bay House, furniture and books to the value of £500 and forced Alexander to auction off the bulk of his library in 1845. We cannot assume, therefore, that the auction catalogue is wholly representative of Macleay's library and a copy of Johann Wolff’s *Icones Cimicum* (1800) at the University of Sydney, which belonged to both Alexander and W.S. Macleay, is an example of one such book that did not go to auction (Figure 3).

![Signature of Alexander Macleay](image)

**Figure 3. The signatures of both father and son on a copy of Wolff's *Icones Cimicum* (1800).**

Johann Friedrich Wolff, *Icones Cimicum Descriptionibus Illustratae*, Erlangae: Apud Ioann. Iacobum Palm, 1800. Fisher Library, Sydney University. RB553.33. This is an example of a book that was probably bought from Alexander Macleay by W.S. Macleay, bequeathed to George Macleay who gave it to W.J. Macleay, who then placed it in the Library of the Linnean Society of NSW. Upon the dispersal of the Society library in 1983, this book was part of a permanent loan made to Sydney University.

---


The loss of the library was one of a number of factors Elizabeth Macarthur included in her enumeration of the sorry decline of the Macleay family:

The family of the Macleans have broken up in an extraordinary and questionable manner ... the best part of the furniture is sold & the library is advertised for sale. These extraordinary changes appal me—they have been of such occurrence of last—that I will not communicate any more—it is to be hoped the Colony will by degree attain a sounder and more healthy state.  

Over four days, Macleay’s 4000 volumes went under the hammer and the categorisation of subjects was wide-ranging:

- History, Biography, Natural History, Botany, Mineralogy and Geology, Natural Philosophy, Chemistry, Medicine and the Arts, Fine Arts and Antiquities,
- Agriculture, Geography and Topography, Voyages and Travel, Divinity, Education, Belles Lettres, Moral Philosophy, Political Economy, Essays Novels Romances etc.
- Poetry, Drama, Magazines etc, Atlases and Portfolios.

Of the titles advertised, 535, or 47% of the entire collection, fell into subject areas that were mainly scientific (Figure 4) and were areas subsequently collected by the Australian Museum up until at least the 1860s. One imagines that members of the committee were disappointed that the Australian Museum was in no financial shape to purchase what would have been a rich source of taxonomic literature.

Intensely hurt by the financial strategies of his son, Alexander in his will of 1846 declared that: ‘in consequence of the rapacious, ungrateful, unnatural and cruel conduct of my eldest son towards me and his mother and all the rest of his family’, he should not inherit any part of Alexander’s real or personal property. Needless to say, Alexander had little to leave when he died in 1848.

Macleay’s apparent generosity in the sharing of his collections in England is less evident in Australia. Indeed, there was disappointment in the metropolis that he

---


88 Blackman (1845).

89 King (1982), p. 46.
had removed such a valuable resource to the antipodes and it seems that, despite his best intentions, Alexander’s collection was not used to its greatest advantage in Sydney. On a number of occasions Macleay blamed his lack of scientific output on his onerous workload as Colonial Secretary, but he still managed to maintain his position as the scientific elder of New South Wales. Although Macleay articulated the need to share resources such as books to benefit the colony, any such sharing on his part appears to have been limited to those he felt were of the ‘appropriate’ social status.

**The AM Circle’s Access to Scientific Literature in the 1830s and 1840s.**

Books served as valuable currency for those new arrivals in Sydney who had an interest in science during the early to mid nineteenth century. We have already seen John Gould deliver a catalogue of the Zoological Society of London, in 1839, along with a letter of introduction from the society’s honorary curator to P.P. King. Similarly, on his arrival in Sydney in the same year, W.B. Clarke delivered the newly published *Silurian System* (1839) to W.S. Macleay on behalf of its author, Roderick Murchison*, and was an act that no doubt helped strengthen Clarke’s

---

*Figure 4. Macleay subject areas later collected by the AML by no. of titles.*
social and scientific credentials. Clarke later noted in a letter of introduction to P.P. King that he would be happy to show his personal copy of Murchison’s book when they met. Elizabeth Webby observed in the introduction to her study of Australian colonial literary culture, 1800–1850, that the lack of discussion about books and reading in the letters and diaries of colonists is challenging and, in her case, forced her to rely mainly on early newspapers for information. While evidence is also limited when considering a scientific literary culture during the same period, the reliance on scientific literature by naturalists to undertake their research means that mentions of books and reading were more likely to appear in their daily letters and research notes. Despite the inevitable loss of much of this early scientific archival material, good examples have survived. Of our AM Circle and its associates, we have mentions of books and reading in the correspondence of W.B. Clarke, W.S. and Alexander Macleay, P.P. King, George Bennett and John Gould. In this section I will build on my discussion of the AM Circle and its society-like activity and consider whether there is any suggestion of a network of individuals who shared scientific literature to achieve their naturalist goals.

Success in the study of natural history at the time of the AM Circle frequently depended on participants’ ability to be part of a network. Naturalists relied not only on descriptions and specimens from distant correspondents, but also on families and friends, communications with scientific societies and sources providing access to publications. This section considers evidence of access to book material through this naturalist network—whether it was the sharing or purchasing of books, the citing of available sources in local publications, or mentions of texts in correspondence. While there is some manuscript and published material that allows us to consider the reception of scientific literature available in early Sydney, this is beyond the scope of this chapter, but is something

---

91 W.B. Clarke to Phillip Parker King, Darlinghurst, Sydney, June 5th 1839, ibid., p. 75.
that will be considered later when discussing the use of AML holdings in the second half of the nineteenth century.

Access to scientific literature in Sydney increased gradually from the 1820s onwards, but because of the slow growth in the number of Sydney booksellers, locals continued to rely on shipments from friends, book dealers and society subscriptions for the latest books and journals. Locally produced material remained limited and newspapers and sporadic periodical publications were the main avenues by which scientific information was communicated until well into the 1860s. Distance, cost and slow delivery severely hampered ready access to the latest information being produced in Britain and Europe at the time of the AM Circle. Figure 5 illustrates the key sources for scientific literature in Australia and their relationship with personal book collections. The diagram’s apparent simplicity belies the complexity of the production and delivery of this type of literature in the first half of the nineteenth century. Because of the multiple roles played by individuals supplying such literature, the context in which material was accessed varied and reflected the complexity of the natural historian network itself. The main sources of scientific literature for Sydney book collectors were authors, publishers, book dealers and auctioneers, scientific societies, and friends and associates. While the movement of literature between the various sources and Sydney’s personal libraries was sometimes in one direction only, such as with authors and publishers distributing their works, it was generally a two-way relationship such as that between the owner of a library and book dealers and auctioneers. The following examples help illustrate the way in which scientific literature flowed within the colony as well as between Sydney, London and the rest of the world.

Authors: Those producing monographs and papers for journals frequently distributed copies of their own works to their scientific associates and there are a number of examples of this among the AM Circle. Not only did Roderick Murchison ask W.B. Clarke to deliver his latest monograph to W.S. Macleay, we know that John Vaughan Thompson presented at least four of his inscribed monographs to
Macleay probably after both men had settled in Australia. George Bennett’s long-term scientific relationship with Richard Owen is represented in a number of presentation copies of Owen’s works made over many decades, and this close relationship later extended to Owen’s purchasing books on behalf of the AML in the 1850s. Such gifts from authors were limited not only to New South Wales or the metropolis but included contacts across the empire, such as Calcutta-based Henry Piddington who presented a meteorological work to W.B. Clarke in 1849.

Publishers: A small number of self-published authors of scientific literature supplied their publications directly to the personal libraries of the AM Circle. While there was a dearth of scientific periodicals in Sydney in the 1830s and ‘40s, correspondents such as W.B. Clarke still had the option of communicating science through the local press. Those who were not living in Sydney had even fewer

---

94 Holland (1996), footnote 36.
95 The Mitchell Library holds a reprint inscribed ‘Geo. Bennett, Esq. ... with the author’s best regards’: Richard Owen, ‘On the Structure of the Brain of Marsupial Animals’, Philosophical Transactions, Part I, 1837. ML DSM/Q569/R. There are also a number of examples of presentation monographs from Owen to Bennett in the Australian Museum Research Library.
96 Henry Piddington to Clarke, Calcutta, 18 June 1849, Moyal (2003), p. 244.
options and P.P. King overcame this by publishing his own meteorological papers while living in Port Stephens in the 1840s. Between 1846 and 1848 King published four papers ‘for private distribution’ totalling almost 100 pages and printed on his own private printing press,\(^97\) three copies of which have survived from W.S. Macleay’s library and are inscribed by the author.\(^98\) At the luxury end of the publishing market was John Gould, who actively corresponded with many of his customers in New South Wales either directly or through his agents John Fairfax and George Bennett when arranging subscriptions and fulfilling book orders. Making personal contact with his colonial customers in the late 1830s, Gould later took advantage of these relationships both in terms of accessing content for new publications and supplying his existing natural history titles.

**Book Dealers & Auctioneers:** It was not until the late 1840s that local book dealers began to rival auctioneers as suppliers of reading material in Sydney,\(^99\) yet the specialised nature of much scientific literature meant that most of it still needed to be ordered from overseas. Not long after her arrival in Australia, Alexander Macleay’s daughter, Fanny, wondered where she would get the books she needed to study German and astronomy: ‘what to do for books I do not know, but I may meet with some by chance perhaps before long. We have now and then a sale of Books in Sydney’.\(^100\) The auction of the Macleay library offered a great opportunity for natural historians on the lookout for scarce books. The auction catalogue included 193 ‘natural history’ titles and places the rather paltry 59 titles listed in a catalogue of the Australian Subscription Library into perspective.\(^101\) Given the rarity of such a sale, local naturalists such as W.S. Macleay tended to rely

---


\(^98\) Fletcher (1920), p. 621.


\(^100\) Fanny Macleay to W.S. Macleay, Sydney, 8 October 1826. Frances Leonora Macleay et al. (1993), p. 67.

on London book dealers for their books and journals, and Macleay's correspondence with book dealers Baillière and William Yarrell in 1839 and 1840 reveals extensive purchases of works on birds, reptiles, fishes, insects, fossils and scientific expeditions, as well as scientific periodicals.102

**Scientific Societies:** While book dealers were able to provide the breadth of literature, scientific society publications provided a centre of gravity to those in the antipodes. These publications were often not included in their membership fee and, as in the case of W.S. Macleay, publications from the Linnean and Zoological Societies were acquired from London booksellers103 W.B. Clarke, on the other hand, obtained his subscription of the *Proceedings of the Geological Society* via the society's secretary.104 Other society periodicals found in Sydney personal libraries include, among others, those from the Royal and Geographical Societies. Given the close-knit social groups that tended to run these societies, we have already seen examples of members, such as Alexander Macleay, not only receiving society publications but also making donations of their own books back to the society. There is no evidence, however, of this happening once members of the AM Circle had settled in Sydney. This lack of donations back to the metropolis is unsurprising given the need for whatever books were available, that there were few locally-produced publications to send back, and that there is unlikely to have been much book material in Sydney in the 1830s or '40s that was not readily available closer to home.

**Friends & Associates:** Facilitating access to books in the isolated colony was often an act of friendship as well as one of mutual interest between fellow natural historians, so the line is often blurred. Correspondence between George Bennett and Richard Owen in the 1830s reveals Bennett’s reliance on Owen for access to scientific literature.105 While Bennett initially has little to offer in return in terms of

---


103 William Yarrell to W.S. Macleay, London, 10 July 1839, ibid.

104 Clarke to Adam Sedgwick, Parramatta, 2 February 1843, Moyal (2003), p. 132.

105 AMS37, George Bennett, ‘George Bennett Papers (1833–1840)’.
locally-produced literature, he does send reprints of papers he had produced for British journals and, starting with the Australian Museum’s first catalogue (1837), was eventually able to offer works published in Australia. Between members of the AM Circle itself we also see acts of friendship, such as when P.P. King sent a duplicate copy he had received of the _Admiralty Manual_ to W.B. Clarke in 1851: ‘I have put your name on it and addressed it to you as a Christmas Box—wishing you many happy returns & the hope that your health may keep with you’.\(^{106}\) While there are few examples of the AM Circle lending each other book material, they frequently cite titles they have read that may relate to a scientific subject under discussion. Examples of correspondence between W.B. Clarke and both W.S. Macleay and P.P. King include not only the mentions of monographs and periodical titles but occasionally include transcriptions of extracted paragraphs to illustrate their point.\(^{107}\)

**Family:** I have found no documentary evidence of the sharing of scientific literature between members of the Macleay family over the first thirty years in which a library was kept at Elizabeth Bay House. Knowledge about the content of Alexander’s library is limited almost solely to Blackman’s 1845 auction catalogue, though less than a dozen volumes marked with Macleay’s signature have since been identified in various libraries. W.S. Macleay had also built up an impressive library and purchased some of his father’s collection prior to its auction. Upon his death, in 1865, William Sharp left his library to his brother George, who, in 1874, had it packed up and shipped to England, save for some entomological volumes which he gave to his cousin, William John Macleay (1820–91)*.\(^{108}\) While there is no surviving correspondence between family members discussing the sharing of books, a letter written in 1836 from Fanny Macleay, in Sydney, to her older brother William Sharp, in London, begs him to send Achille Compte’s _Règne Animal de M. le Baron Cuvier Disposé en Tableaux Méthodiques_, with an offer to pay on receipt of

---

\(^{106}\) Phillip Parker King to W.B. Clarke, Newlands, 26 December 1851, Moyal (2003), p. 331.

\(^{107}\) Moyal (2003).

\(^{108}\) Fletcher (1920), p. 633.
her order. It’s not certain who paid for the book as Fanny died within six months of making her request.

The complexity of the multiple roles played by individuals supplying such literature to local naturalists at this time is exemplified by John Gould. Not only the author and publisher of his extensive series of illustrated volumes on Australian birds and mammals, Gould was a book dealer who supplied non-Gould periodicals and monographs to individuals and libraries, and undoubtedly considered himself an associate if not friend of some of the AM Circle. Authors and occasional self-publishers, such as William Swainson, were closely associated with fellow members of scientific societies (including some in the AM Circle), while book dealers, such as zoologist and author William Yarrell, also had close scientific and book-supplying relationships with fellow naturalists such as W.S. Macleay. Correspondence is peppered with references by English authors offering to supply copies to friends of their latest publication or those of fellow associates and, similarly, their antipodean friends offer to pay for publications newly released ‘at home’.

Despite the numerous examples of those in the colony accessing and circulating scientific literature through the six sources identified and their permutations, there are fewer instances of the sharing of books between personal libraries as espoused by Alexander Macleay. This is not to say sharing did not occur between naturalists in New South Wales (indeed we know that Ludwig Leichhardt made

\[\text{\textsuperscript{109}}\] Fanny Macleay to W.S. Macleay, Sydney, 10 February 1836, Frances Leonora Macleay et al. (1993), p. 176.

lists of books he had lent to people) but distance and the slow and precarious mail service may have been a deterrent to those considering lending their precious books, even within the same town. It may also be a matter of the physical sharing of this material not being recorded, whether it is books handed from one committee member to another at a Museum committee meeting or during visits to each other’s homes. If, for example, the ‘friends’ of Alexander Macleay wished to use his library, it is possible that they were expected to consult the resource in situ.

Alexander Macleay’s declaration, in 1843, that ‘all my library is accessible to all my friends who study science’, raises questions about who those friends might or might not have been and how this affected scientific communication. It is probable that all those in the AM Circle had access to Macleay’s library at some time during the 1830s and early ‘40s. Even this assumption is tempered by instances of feuds and animosity between members of the circle, such as the estrangement between the Macleay family and Edward Deas Thomson in the second half of the 1830s—the result of Thomson’s acceptance of the position of Colonial Secretary following Macleay’s ousting in 1836.\(^{112}\)

Of particular interest, however, is the position of the AM Circle Associates George Bennett and John Gould, both significant players in the development of access to scientific literature at the Australian Museum and across New South Wales more generally. While there was some gap between the social origins of Dr Bennett and his friend John Gould, a gardener’s son, neither was immune to the social strictures imposed by the New South Wales scientific and social elite. In 1836, Bennett was keen for employment at the Sydney Hospital and wrote optimistically to Richard Owen of his improved chances because of the impending arrival of Dr John Vaughan Thompson, the new Inspector of Hospitals.\(^{113}\) On two occasions he

---


\(^{113}\) AMS37 George Bennett Papers (1833–1840), George Bennett to Richard Owen, Sydney, 10 March 1836.
suggests to Owen that a letter of recommendation to Thompson from Dr George James Guthrie, an influential figure at the Royal College of Surgeons, of which Bennett was a member, may help secure a position at the hospital. Despite reporting to Owen that he had lent a specimen to Thompson, that Thompson had called on him and that they were ‘on good acquaintance’, Bennett still felt it essential that he provide a letter of introduction to Thompson.\textsuperscript{114} Whether a letter was sent or not, and despite Thompson’s appointment to the Museum Committee, Bennett did not obtain employment at the hospital and was to continue managing the Australian Museum’s collections and general business until 1841. As we shall see in the following section, John Gould also faced a level of prejudice when dealing with the leaders of the colony.

\textit{The Use of Scientific Literature for the AM’s First Catalogue}

One of Bennett’s first tasks as curator was to arrange and list the museum’s collection. In September 1837, tenders were called for the printing of Bennett’s manuscript catalogue and 500 copies were produced by James Tegg and Co. in Sydney in late 1837.\textsuperscript{115} \textit{A Catalogue of the Specimens of Natural History and Miscellaneous Curiosities Deposited in the Australian Museum} is 71 pages long and divided into ten sections:

- Mammalia; Aves, or Birds; Reptilia or Reptiles; Pisces, or Fishes; Skulls, &c., of Mammalia, Birds, Fishes, &c.; Insecta, or Insects; Shells; Fossils, Minerals, &c.;
- Wet Preparations; and Native Ornaments, Weapons, Utensils, &c.

The use of both Latin and English in its sectional headings suggests that some provision is being made for those in the colony with a lesser education, and the brevity of the descriptions is explained in an introductory note where haste was required to ‘produce as early as possible a list of the specimens contained in the Museum’.\textsuperscript{116} An opening caveat also notifies readers that ‘the arrangement of the following catalogue is wholly due to the labours of the Secretary, who is alone

\begin{footnotesize}
\begin{enumerate}
\item[114] George Bennett to Richard Owen, Sydney, 14 May 1836, ibid.
\item[115] AMS1 Trustees Meetings, 4 October 1837.
\end{enumerate}
\end{footnotesize}
responsible for the names and synonyms attached to the specimens’, and one immediately wonders from where Bennett sourced the impressive list of natural history texts he cites in his descriptions of these species. For example:

29.—HALCYON COLLARIS—Swains. Zool. Illus. pl. 27.
Sacred Kingfisher—Phillip, Bot. Bay, pl. in p. 156.

Habitat, Port Macquarie.

MALE.

In describing this kingfisher, is it possible that Bennett had accessed William Swainson’s *Zoological Illustrations* (1821), John Latham’s *Index Ornithologicus* (1790), and Arthur Phillip’s *Voyage of Governor Phillip to Botany Bay* (1789) at the home of Alexander Macleay? Indeed, both the Latham and Phillip were included in Macleay’s auction list in 1845, but there is no sign of Swainson’s *Zoological Illustrations*. While we cannot assume that all of Macleay’s books were put up for sale and we know William Sharp took some of the collection, a closer examination reveals that Bennett sourced his references, although unacknowledged, from a single printed source available in the colony.

Taking advantage of what was once described as the most valuable collection of Australian birds in the country, Nicholas Aylward Vigors and Thomas Horsfield presented Part 1 of their paper, *A Description of the Australian Birds in the Collection of the Linnean Society*, at Linnean Society meetings in June 1825 and January 1826, in which they identified a number of new genera and more than twenty new species. In their introduction to the paper, the authors pay homage to Alexander and William Sharp Macleay by basing their paper on William’s

---

117 ibid.
118 ibid. p. 16.
quinary system of classification and noting the imminent departure of the Society’s former secretary. Both Alexander and William were probably present at the first reading.\footnote{While the first reading was made just before Alexander left for Australia and William for Cuba, there is no doubt both men were familiar with the paper’s contents and had probably assisted in its composition. William had previously read a portion of the paper at a meeting of the Zoological Club on 22 March 1825. \textit{Zoological Journal}, vol. 2, no. 5, 1825, p. 137.} Ten years later, George Bennett used Vigors’ and Horsfield’s paper as the basis for much of his bird classification in the Australian Museum’s catalogue. Of the first two orders of birds, ‘birds of prey’ and ‘perchers’, consisting of 211 species, it is clear that 160 (76\%) of the specimens have been described using the Vigors and Horsfield paper published in the \textit{Transactions of the Linnean Society}, vol. 15, 1827 (see Figure 6).

Once again, the influence of the Linnean Society on the activity of the Australian Museum is palpable and as six of the nine members of the AM Circle were Linnean fellows and probably subscribed to the journal, not to mention George Bennett himself, there was no shortage of copies to work from. It is interesting to speculate whether Macleay directed Bennett to the paper he had been so closely connected with and whether he provided access to references that were used by Bennett for some of the species described elsewhere in the catalogue. The one other significant title referred to in Bennett’s description of the first two orders of birds is John Gould’s \textit{A Synopsis of the Birds of Australia and the Adjacent Islands} (London, 1837–38)—and it was Bennett who owned the only copy in Australia at the time of compiling the catalogue.\footnote{Bennett reported to Richard Owen in September 1837, the month in which the Australian Museum catalogue was tendered for printing, that Gould had sent him Part 1 of \textit{Birds of Australia} and that ‘King and M’Leay are much pleased with it’. Gordon C. Sauer, ‘An Earlier Date for the Arrival in Australia of John Gould’s “A Synopsis of the Birds of Australia and the Adjacent Islands”’, \textit{Emu}, vol. 83, 1983, p. 119.} Not only did Bennett integrate this latest information from London into his catalogue, he was quite happy to report to Owen, back in the metropolis, of Gould’s incorrect colouring of the ‘Bald-Headed Friar’.\footnote{ibid.} The arrival of John Gould’s \textit{Synopsis} in New South Wales, two years before the man himself, was first noted by Gordon C. Sauer in 1983. This is the first time, however, that the use of this work in an Australian publication as early as 1837 has been observed.

The original source for Bennett’s references in Vigors’ and Horsfield’s ‘A Description of the Australian Birds in the Collection of the Linnean Society’ (1827), p. 206.

Figure 6. From the Metropolis to the Periphery: An Example of George Bennett’s use of Vigors & Horsfield.
Reciprocating Bennett’s use of his publication, Gould recommended Bennett’s catalogue to a specimen collector employed by Gould, John Gilbert, and suggested that he use the catalogue to better understand the animals on display while visiting the Australian Museum.\(^{125}\) Gould’s own copy of the catalogue is now held in the library of the Academy of Natural Sciences, Philadelphia,\(^{126}\) and his brief annotations were made when visiting the Museum, probably in September 1839, and while a guest at the home of George Bennett. All annotations relate to the first section on mammalia in the catalogue and there are no markings in the bird section, suggesting that Gould recognised the Vigors and Horsfield source for most of the bird references and that he was keeping more copious notes elsewhere. There was clearly an affinity between Bennett and Gould, perhaps no less because of the superior attitude of the AM Circle towards them. Despite P.P. King and Alexander Macleay expressing to Bennett their pleasure with the latest work of John Gould in 1837,\(^{127}\) Lady Jane Franklin reports in her diary for 1839, of P.P. King’s embarrassment at Gould’s unrefined ways:

> Captain King agreed with me as to Mr Gould being an entirely uneducated man. He said when he came here he brought verbal introductions from Sir John to different individuals & went up to them & said ‘Sir John Franklin desired me to give his compliments’.

While Gould would rely on the wealth and support of the British aristocracy and elites around the globe to consume his luxury publications in the years to come, his mission to describe and illustrate all the birds and mammals in Australia during a period of such limited infrastructure required considerable self-reliance. He arrived without access to the libraries of London but there is no doubt that he would have had access to Bennett’s library. There is no record of Gould consulting


\(^{126}\) The Academy’s copy is signed by John Gould on the cover and may have been acquired by the institution when Gould sold many of his Australian type bird specimens to the Academy in 1848. The Gould copy is held in the Ewell Sale Stewart, Academy of Natural Sciences, Philadelphia, QH71.A85 A4.

\(^{127}\) See note 123.

the library at Elizabeth Bay House, though we know he spent at least one day visiting the grounds while in Sydney. Indeed, Gould’s collector, John Gilbert, spent many months scouring the bush for new animals with little more than a copy of Gould’s *Synopsis of the Birds of Australia* and G.R. Waterhouse’s *Mammalia, Marsupialia, or Pouched animals* (1841). Gilbert complained to Gould on a number of occasions about his lack of reference tools: ‘many of the Birds as you may suppose, are new to me, and I feel it a great loss in not having books beyond your Synopsis that I can refer to.’ Gilbert’s words, written in Perth in 1839, could not have been expressed any further away from the most important scientific library on the continent; and as a man who could not read Latin and had to learn the ‘Linnean names’ from specimen labels in the Australian Museum, he may have been less than welcome in the Macleay household.

## Conclusion

Alexander Macleay brought to Australia one of the world’s most important insect collections, a library of considerable value, a set of administrative skills and values he had accumulated over years with the Linnean Society, and an expectation of contributing to the knowledge of Australian flora and fauna. The reality of the demands of his role in the colony, a lack of resources for scientific activity, the absence from Sydney of some of the AM Circle’s key members in the 1840s and infighting between members stymied his founding of a traditional scientific society in New South Wales. Despite these setbacks, the experience of, and connection to, established scientific societies in the metropolis among key members of the Australian Museum Committee are to some degree quantifiable and suggest a common ground on which they could communicate scientific interests.

---


131 On 4 May 1840, while in Sydney, Gilbert complained to Gould that he could not read the long list of desiderata of scientific names Gould had left in Latin for him. Gilbert to Gould, Sydney, 4 May 1840. John Gould, *Correspondence*, vol. 2, 1839 through 1841, 1998, p. 169. To solve this problem, Gilbert reports on 15 May, 1840, that he has studied the birds in the Museum and learnt their Linnean names. ibid., p. 171.
As collectors and classifiers, these men required constant access to scientific literature in a colony where little was available locally and was expensive. While Macleay publicly advocated the sharing of book resources and supported such a strategy at the first meeting of the Australian Museum Committee, it is harder to find evidence of Macleay embracing this practice with his own library. There were, however, a number of avenues beyond sharing by which scientific literature was circulating through the colony, though there is a case for arguing that a number of talented naturalists were hampered in their research by limited access to scientific works because of their social position. Some of these, such as George Bennett and John Gould, would go on to earn considerable respect and play an important role in the development of the Australian Museum Library. In the next chapter we will discover how Alexander Macleay's aspiration for a place in which scientific activity could be supported and shared amongst the elite would be strengthened and then challenged, and how the founding and development of an institutional library mirrored this change.
Chapter Two: The Founding of the Australian Museum Library and its Early Development, 1849–1883

At the time of Alexander Macleay’s death, in July 1848, the new museum on the corner of William and College Streets was far from finished and its limited scientific activity meant there was little justification for a library. The bulk of the colony’s natural sciences literature remained secreted in a few of the colony’s private libraries. Yet within 15 years the Australian Museum had acquired a modest collection of over 500 scientific titles to line the walls of its boardroom. By 1883, when the Museum’s first library catalogue was published, almost 1,200 titles were listed and staff struggled to manage the 2,700 volumes on the shelves. Little has been published about the circumstances of the formation of the library and its relationship to the Museum’s development in these early years.

There has long been agreement that Governor William Denison played an important role in coordinating and energising scientific activity in New South Wales in the 1850s.¹ His influence was also felt at the Australian Museum where he broadened the institution’s focus by expanding its classificatory role, encouraged more intercolonial and international specimen exchanges and pressed the Parliament for increased funding. Although a ‘gentleman of science’ and politically conservative, Denison’s scientific activity has been regarded by some as a foil to the self-interest of the Macleays and their circle.² Denison, the Trustees and Museum staff were all involved in the development of the AML and, just as other library histories have demonstrated a greater understanding of the parent institution and its context, this historical study aims to complement and improve our knowledge of the priorities and processes of developing scientific infrastructure at the Australian Museum and in New South Wales more generally. This chapter outlines a history of the development of the library over a 35 year

¹ Hoare (1974), pp. 126–81
² ibid., p. 175.
period and provides a framework to support the more detailed discussions about
the collections, and how they were managed and used, in subsequent chapters.

**Faltering Steps, 1849–1854**

In March 1849, the Museum Committee appointed a book sub-committee
consisting of W. S. Macleay, George Bennett and Rev. G. E. Turner to:

select and order such books from England as they think best to form the nucleus
of a library of natural history to be attached to the Museum—the amount not to
exceed fifty Pounds.³

The need to ‘form the nucleus of a library’ indicates that the Museum had failed to
collect scientific references as recommended by the founding committee in 1836.
The impetus for creating the committee was likely to have been the expectation of
a permanent site for the Museum’s collections. Despite the slow construction of the
new building, which had commenced in early 1846, and the lack of a completed
roof until well into 1850, groups such as the Australasian Botanical and
Horticultural Society were using the site for regular meetings from late 1848.⁴
While the book committee may have been established, there is no record of book
purchases being made over the following eight years or surviving evidence on
books in the AMRL indicating purchases this early.⁵ Regardless of whether any
purchases were made, the decision to form a library seems to have lacked
commitment and it was another decade before the Museum was able to enlist
major funding for a library.

---

³ AMS1, Trustee Minutes, 24 March 1849.
Australian Museum*, vol. 12, no. 12, 1919, p. 361.
⁵ Michael Hoare has misread a comment made by Ludwig Leichhardt about scientific resources
available in Sydney in 1842 and suggests that there was an established library at the Museum at
this time: ‘the Australian Museum “was in disorder” and its library “in some respects well
was actually referring to the Australian Subscription Library: ‘The Botanic Gardens, if nothing
else, are decidedly well laid out ... The Museum has at least been established; but the Library, in
some respects very well stocked, is unfortunately not so for natural sciences...there’s a School of
Arts where public lectures are delivered...’. Ludwig Leichhardt to Dr Little, Sydney, 25 March
Of the three men sitting on this first book committee, we know that both W.S. Macleay and George Bennett had accumulated extensive and rich personal libraries by the end of their lives. There is little doubt that in 1849 Macleay had a library worthy of a small museum, much of which he had brought with him from England, whereas the Bennett library was probably of a more modest size at this time and reflected the surgeon’s smaller income. Given Bennett’s frustration at accessing publications earlier in the 1830s, one can see what an attraction a natural history museum library would have been to many of the local naturalists. Indeed, this lack of available scientific references was noted in the Australian Museum’s first memoir, written by W.S. Macleay, *History and Description of the Skeleton of a New Sperm Whale*, published in 1851. However, the range of scientific works referenced in this book—most likely sourced from W.S. Macleay’s own library—indicates that he had access to significant scientific titles and that complaints about limited access to texts was relative. This helps explain why Macleay may not have felt much personal motivation to drive the work of the book committee in the late 1840s.

One of the earliest book acquisitions recorded by the Museum was a donation, in February 1851, by Lancelot Threlkeld of his study of Aboriginal languages in the Hunter region. Donations remained the primary source of books accessioned by the Museum until the late 1850s, with official contributions coming via the Colonial Secretary and Governor General, gifts arriving from British institutions such as the

---

6 When the property of the late W.S. Macleay’s was being organised for his brother George, in 1874, it was reported that 13 cases of books had been packed at Elizabeth Bay House and ‘there are still a large number of books remaining on the shelves’. Fletcher (1920), p. 633. A proportion of Bennett’s library was listed in *Catalogue of a Choice Portion of the Library of the Late Dr George Bennett*, Sydney: William Dymock, New and Second-hand Bookseller, [1895].


8 Lancelot Edward Threlkeld, *A Key to the Structure of the Aboriginal Language ... Spoken by the Aborigines in the Vicinity of Hunter River, Lake Macquarie, etc., New South Wales: Together with Comparisons of Polynesian and Other Dialects*, Sydney: Printed by Kemp and Fairfax, 1850. Threlkeld was sent a letter of thanks for his ‘very interesting work’ by George E. Turner, honorary secretary. Turner to Threlkeld, Australian Museum, 3 February 1851. ML A382, p. 77.
British Museum, Royal College of Surgeons, the Geological Survey Department of Great Britain and the Admiralty, as well as donations from visiting expeditions, representatives of other scientific institutions and private individuals. As we shall see, many of these donations were the result of the work of William Denison.

The largest single private donation recorded during this period, of almost 300 volumes, came from the library of trustee Phillip Parker King in two lots in the mid-1850s (Appendix D). King’s initial donation, in 1854, included works by Linnaeus, Cuvier and 25 scientific volumes of the Encyclopédie Méthodique; while the second gift, following his death in 1856, consisted mainly of geographical, nautical and astronomical texts. Few of these latter books were listed in the AML’s book register, created in 1883, and their discarding suggests that they had not been considered particularly useful to the Museum’s work. Only six months before the AM’s acceptance of P.P. King’s first donation, the Museum had agreed to temporarily store the possessions of explorer Ludwig Leichhardt, who had gone missing in 1848. While the trustees intended returning the collection to Leichhardt’s family, Rev. W.B. Clarke observed at the time that some of the books would make ‘valuable additions to the Museum Library’. In the end, however, few of Leichhardt’s books were kept by the AM and, like many of P.P. King’s donations, were considered surplus to the Museum’s needs (see the following chapter for a detailed discussion of Leichhardt’s library).

The haphazard range of titles collected by the Museum through its donations in the early 1850s is unsurprising given the lack of focussed research activity, the lack of funding dedicated to targeted book purchases, and no evidence of policy linking the two. While most of the early titles related to the sciences, other titles such as Grammar and Dictionary of the Dakota Language (1852) and Handbook to the

---

10 See list of titles in ‘Phillip Parker Donations’, Appendix D.


Antiquities in the British Museum (1851)\(^\text{13}\) reflect not only the importance of accepting book donations from other institutions and individuals as an act of courtesy, but also an apparent lack of discrimination typical of organisations still defining themselves in their earlier years.

The first mention of books in relation to broader museum policy appeared in early 1853, in a draft bill prepared by a subcommittee exploring the options for a new constitution and the incorporation of the Museum.\(^\text{14}\) The governing Committee had no statutory authority and, in early 1851, established a subcommittee ‘to report upon the best means to be adopted for ameliorating the Constitution of the Committee of Management’.\(^\text{15}\) The subcommittee was no doubt encouraged to speed up its deliberations when a request was received from the University of Sydney, in early 1852, asking the Committee to consider ‘upon what terms the Museum and grounds might be transferred to the University’.\(^\text{16}\) The Museum flatly refused to consider the offer and advised the University that its Committee of Management had no constitutional power to make such a decision.\(^\text{17}\) In late 1852, P.P. King advised the Committee that a subcommittee should be established to consider the possibility of requesting the Governor to introduce a bill into the Legislative Council to incorporate the institution.\(^\text{18}\) King, W.S. Macleay and Dr George Witt presented a comprehensive report to the Committee at the beginning

\(^{13}\) W. S. W. Vaux, Handbook to the Antiquities in the British Museum: Being a Description of the Remains of Greek, Assyrian, Egyptian, and Etruscan Art Preserved There, London: John Murray, Albermarle Street, 1851. Donated by Miss Caroline Ludom, June 1854.

\(^{14}\) Influenced by the British Museum model, the mention of ‘books’ in the draft bill is in a much broader context than a science library and did not appear in the final document: ‘Whereas the objects of Natural History and other property belonging to the Colony of New South Wales, and contained within the precincts of the Australian Museum have now become of considerable value and whereas it is deemed expedient for public convenience and the promotion of literature and science that the books, pictures, manuscripts, statues, specimens of natural history and other objects which the Colony may now possess or hereafter acquire by gift, bequest, purchase or exchange should be deposited in the custody of trustworthy persons’. AMS1, Trustee Minutes, 1 January, 1853.

\(^{15}\) ibid., 8 February, 1851.

\(^{16}\) AMS7, Letters Received, G:35.52.01, Secretary of the University of Sydney to the Committee of Management, 16 January 1852.

\(^{17}\) AMS1, Trustee Minutes, 20 January, 1852.

\(^{18}\) ibid., 4 December, 1852.
of 1853. The document included an interesting comparison between the constitutions of the British Museum and the *Jardin des Plantes*, in Paris, as it was felt these institutions represented the two typical methods of public museum management in Europe: ‘those which are governed chiefly by administrators of rank or political influence, and those which are administered by Professors of Science or Literature’.¹⁹ Unsurprisingly, the British Museum was chosen as the preferred model and while Hoare notes that this choice ensured a structure that underpinned the powerbase of the Macleay family,²⁰ Van Leeuwen also observes that the number of salaried experts needed to emulate the French model was simply not available in the colony.²¹

The new board consisted of 24 Trustees, eleven of them government nominees, and they managed a budget of £1000 per annum. The elective trustee positions had unlimited tenure and the same voting power as the official trustees. Many of the nominated senior public servants tended not to participate in board activities, and, as a consequence, the elective trustees became somewhat entrenched and governed with an independence that at times placed the Board in conflict with some of the colony’s parliamentarians. While the need for a library was not specifically articulated in the process leading up to incorporation, nor in the first bye-laws passed in 1855,²² the confidence generated by having a more secure and independent board, with better funding and a new building to house the Museum’s collections, can only have helped create an environment in which trustees felt investment in a major book collection might be worthwhile.

Having displayed a desire to form a small library in 1849, the Committee had failed to follow through with its own directive. Ongoing delays in the construction of the new Museum, limited resources, and W.S. Macleay’s access to his own sizeable scientific library appear to have dampened any initial enthusiasm. The confidence

---

¹⁹ ibid., 1 January, 1853.
²² The bye-laws were passed on 14 April 1855 and are reproduced in Etheridge (1919), pp. 378–79.
created by the Museum’s incorporation, however, appears to have been the impetus for P.P. King to donate the first large donation to the museum and provide a core, if piecemeal collection, around which the library could be formed.

The Influence of Governor William Thomas Denison, 1855–1861

Despite there being a number of Museum trustees who valued a good scientific library and were involved in the development of institutions such as the Australian Subscription Library, the AM had little book material to show when the new governor of New South Wales, Sir William Denison, joined the Board in September 1855. Denison was 51 years old—sharing his birth year with Richard Owen, John Gould and George Bennett—and could point to a career that had included a significant contribution as a Royal Engineer and almost a decade as a successful colonial governor. Educated at Eton and the Royal Military College, Denison worked on the Rideau Canal in Canada, set up an observatory at Chatham and supervised dockyard works at Portsmouth, Woolwich and Bermuda. The study of natural history for both ‘business’ and ‘relaxation’ was a particular pleasure for this Fellow of the Royal Society of London,23 and Denison was keen to share his interests in geology and the study of shells with like-minded individuals.

Denison had been first employed in Australia as lieutenant-governor of Van Diemen’s Land, serving there between 1847 and 1855. Conservative by nature, the new governor was tough on the treatment of convicts on the island, opposed to the democratic principles much discussed in the Australian colonies in the 1850s, and a fervent Anglican fundamentalist who had no time for the evolutionary theories of Darwin.24 Yet his interest in science and a practical approach to problem solving resulted in the growth of scientific infrastructure, research and discussion in both Van Diemen’s Land and New South Wales during his periods of tenure.

---

Denison’s propensity to force issues, demand results and drive through agendas no doubt ruffled feathers, but to some, such as the AM’s curator Simon Rood Pittard (1821–61) who regretted Denison’s departure in 1861, the manner of this paternalistic figure was reassuring and a challenge to the whims of the Macleay family:

He took great interest in the Museum—came here two or three times a week. His bearing was: “I can appreciate you rightly; do your duty and I’ll uphold you but if you fail in your duty don’t expect me to spare you.” Oh! The comfort of such a ruler! Now all is changed—I have to be humouring and humbugging one old selfish oddity and another.25

Similarly, Lady Denison observed the gratitude of those societies and institutions her husband had supported while in Van Diemen’s Land:

It is pleasing to see that every one of these different bodies have in some way or other to acknowledge William’s special usefulness to them: it shows, I think, in a nice way, how never failingly he has given a helping hand to everything good or useful, of any sort, that came in his way.26

Denison was responsible for the expansion of the Royal Society in Hobart soon after his arrival,27 ensuring greater funding and an impetus for scientific work in the colony, which he felt needed to be progressed:

The great evil of these colonies is the absence of scientific men. Many of the settlers have had some education, but there are but few or none in this colony who can fairly be called men of science, and the consequence is that the half-educated, with but a smattering of knowledge are able to lead the more ignorant by the nose. I have set on foot a scientific society; that is, I have succeeded in making a society, which had been nominally established several years, perform some work, and I hope to be able to forward home a specimen of its labours shortly.28

---

It was also during Denison’s presidency of the Royal Society that a stronger scientific book collection was developed. Following the founding of the Tasmanian Public Library, in 1849, the Society restricted the purchase of books ‘to such as are of a scientific character’.29 At the same time, John Gould’s two expensive titles on the birds and mammals of Australia were subscribed to and added to the 250 monograph volumes already listed on the library register.30 The Society included a catalogue of books in its annual report for 1850 and subsequently published Australia’s first predominantly scientific library catalogue in 1856. The Catalogue of Books in the Library of the Royal Society of Tasmania was a small publication of 53 pages arranged alphabetically by author.31 Each entry is prefaced by a register number and donors are acknowledged for each title. A variety of donors’ names are listed, and though it was published more than a year after Denison’s departure from Hobart, acknowledgements such as ‘From Sir W. Denison’ or ‘From the Society, through Sir W. Denison’ appear regularly against titles and indicate the Governor’s considerable involvement in the growth of the library.

While we know Denison occasionally borrowed from the Society library,32 the extent of the large personal library he carried with him no doubt provided a degree of self-sufficiency:

I fancy but few Governors move about the world with a library of two thousand volumes. It is, however, a great satisfaction to me to have books at hand, and it is such an inducement to children to read, that it is well worth the cost and trouble of moving.33

---

30 ibid.
32 Denison took particular interest in Joseph Dalton Hooker’s Rhododendrons of Sikkim- Himalaya (1849–51), which the Governor had on loan for over two months in late 1853. Rhododendrons of the Himalayas lent to Denison, 31 Oct. 1853. Royal Society of Tasmania, Books Issued, 31 January 1852 – 8 April 1897. Royal Society of Tasmania Library, University of Tasmania. RSAG 1, 3.
The Denisons, their many children and their books landed on the shores of Sydney Harbour on 17 January 1855 and, within only a matter of months, the Governor was ensconced on the Board of the Australian Museum. The influence of this ‘star recruit’ was soon felt by the trustees when, in February 1856, Denison commented on the poor and unfinished state of the museum building and articulated a strategy by which the Museum should engage with other scientific institutions:

That a letter be addressed to the Trustees or Managers of the different Museums in Europe etc expressing the willingness of the Trustees to collect and forward specimens of natural History belonging to the Australian Colonies, for the purpose of Exchanging them for European specimens.34

This ambition was realised in the following May when a circular proposing specimen exchanges was printed and forwarded to more than 80 Museums and scientific societies ‘all over the civilized world’.35

While the circular did not include a request for exchanges of scientific literature—perhaps not surprising given the AM’s lack of exchangeable publications—the second donation of works from P.P. King’s library, in April 1856, appears to have motivated the Board to make plans for its book collection. In the following August the trustees instructed secretary George French Angas (1822–86)* to ‘make out a list of all the works contained in the Museum Library’.36 The 350 or so donated volumes listed in the Museum Board minutes reveal a collection that was becoming unwieldy and provided the impetus for a catalogue. While King’s bequest had forced the Board to acknowledge that it now had a small library to manage, many of the titles had little immediate relevance to the natural history interests of the museum. Needing more useful works, the Board decided that ‘the sum of £50 be set aside from the Museum funds for the purchase of works of reference on Natural History’.37 W.S. Macleay and George Bennett, both members of the original 1849 book committee, were joined by Professor Smith and Rev. W.B.

34 AMS1, Trustee Minutes, 2 February 1856.
35 Printed Circular, 1 May 1856, enclosed in Denison, Governor’s Despatches, 20 June 1856 no.102, Great Britain. Colonial Office – New South Wales, ‘Original Correspondence’, ML CO 201.
36 AMS1, Trustee Minutes, 2 August 1856.
37 ibid.
Clarke to oversee the task on a new committee. Things continued to move slowly and it was not until March 1857 that George Bennett presented eight scientific works to the Board for its approval.\(^{38}\) These recent titles, all published after 1840, had been provided for inspection by local bookseller, John Cooke, and were valued at less than £5.\(^{39}\) Half of the titles related to zoology and the remainder marine animals and conchology (the classification of shells)—the latter being a particularly strong interest of Governor Denison, whose signature authorised the payment. At the same meeting the Board agreed to purchase a stamp for the Museum Library at a cost of 15/- from local bookseller and stationer, William Maddock, but a stamp was not actually ordered until mid 1859.\(^{40}\)

Never one to dawdle, Denison had already started to acquire scientific works for New South Wales through official channels a few months earlier, in October 1856. The Governor had asked his friend Henry Labouchere, the Secretary of State, to supply maps and memoirs produced by the Geological Survey of Great Britain for the use of the colony. While the Australian Museum is not mentioned in Denison’s despatch, he hoped that the publications would enable local geologists ‘to contribute largely towards the Museum of Practical Geology’ back in London.\(^{41}\) The Colonial Office acted swiftly and forwarded Denison’s request to the Director General of the Survey and Denison’s friend, Sir Roderick Murchison, for his consideration. The AM was notified in September 1857 by the Colonial Secretary’s Office that the publications would be deposited in the Australian Museum \textit{until a public library is established} [my italics] in the colony.\(^{42}\) The Museum’s caretaker role for potential public book collections continued into the 1860s and probably reflected the AM Trustees’ submission to the government, led by Denison, of a plan

\(^{38}\) AMS1, Trustee Minutes, 7 March 1857.
\(^{39}\) AMS7, Letters Received, 1853–1883, F:11 [John Cooke Invoice, 28 February 1857]. See Chapter Six, \textit{Creating the Canon: Developing the AML’s Collection, 1836–83}, for further discussion of these titles.
\(^{40}\) AMS1, Trustee Minutes, 5 May 1859.
\(^{41}\) Public Record Office, Sir William Denison to Henry Labouchere, 24 October 1856, Despatch no. 168, 1151, CO 201/495.
\(^{42}\) AMS7, Letters Received, 1853–1883, F:30:57, Colonial Secretary’s Office to the Secretary, AM no. 106, 14 September 1857.
for an expanded museum, which would include space for a Free Public Library.\textsuperscript{43} In the end, the geological works were delivered to the Museum, the Free Public Library was not built on the College Street site and the books in question have remained with the institution ever since.\textsuperscript{44}

Denison continued to lobby for books from the Colonial Office and, in February 1859, he asked if new natural sciences publications relating to the Geological Survey of Great Britain and nautical surveys produced by the Admiralty could be sent to the ‘Library of the Museum at Sydney’.\textsuperscript{45} Comments subsequently written on Denison’s letter by staff at the Colonial Office, and in later draft responses to his call for books, reveal the Office’s reluctance to encourage such requests. There was a concern that Denison did not specify exactly which works he wanted and Lord Carnarvon, under-secretary of state, tartly observed that ‘Sir W. Denison does not offer us anything in exchange as is usual with him when collecting for his N.S.W. Museum’.\textsuperscript{46} In preparing the Office’s response to Denison, assistant under-secretary, T.F. Elliot, noted that he would omit words that ‘might lead to fresh demands from Sir William, as he is not backward in proposing such requests’.\textsuperscript{47} Denison’s book orders were communicated to Sir Roderick Murchison at the Geological Survey Office as well as to the Board of Admiralty, and both agreed to send copies of their publications to Sydney.\textsuperscript{48}

The apparent niggardliness in facilitating the delivery of the newest government publications to New South Wales is also reflected in responses for book material from other colonies at the time. In the same year, such a request for Parliamentary

\textsuperscript{43} Strahan (1979), p. 113. More detail of the plan was published in \textit{SMH}, 10 May 1858, p. 5.
\textsuperscript{44} AMS1, Trustee Minutes, 10 October 1857. A list of the material was included in an accompanying memorandum: AMS7, Letters Received, 1853–1883, F:30:57 Museum Practical Geology to Governor General, 23 March 1857.
\textsuperscript{45} Public Record Office, Sir William Denison to Sir E. Bulwer Lytton, 5 February 1859, Despatch no. 13, 3845, CO 201/508, p. 99.
\textsuperscript{46} ibid.
\textsuperscript{47} Public Record Office, Draft, T.F. Elliot to Sir W. Denison, 17 May 1859, Despatch no. 45, CO 201/508, p. 103.
\textsuperscript{48} AMS7, Letters Received, 1853–1883, F:30.59, Carnarvon for E.B. Lytton to Sir William Denison, 17 May 1859.
Blue Books to form the foundation collection of the Legislative Council Library in British Columbia elicited a missive from one bureaucrat to another noting that the ‘requisition is of reckless magnitude’ and that ‘the cost and difficulty of supply will probably be very great’.\(^4^9\) Despite this apparent reluctance of the Colonial Office to assist, requests for books on statistics and other areas of practical knowledge were usually complied with and had been regularly sent to New South Wales since the beginning of the 1840s.\(^5^0\)

The Museum had not limited its request for British institutional book donations to the Colonial Office alone, approaching the Trustees of the British Museum (BM), in August 1857, and requesting a set of their catalogues.\(^5^1\) The BM trustees agreed and a set of zoological publications, consisting of 65 parts, was delivered to the AM nine months later.\(^5^2\) This request for British catalogues appears to have been motivated by Denison’s desire to acquire tools to help drive the exchange of specimens with other societies and institutions.\(^5^3\) He argued that the listing of the AM’s collections in a catalogue was a prerequisite for the museum to identify gaps that could be filled through foreign exchanges. A month after the arrival of the BM catalogues, W.S. Macleay presented to the Board some of the publications as examples that could be followed by the staff in Sydney.\(^5^4\) Secretary Angas was immediately instructed to commence a catalogue of the Museum’s mollusca specimens using S.P. Woodward’s arrangement in the Catalogue of Mollusca in the British Museum (1853). The curator, William Sheridan Wall (1815–76)*, was instructed to start a catalogue of the birds in the AM and both employees were directed to present their progress each month before the Board.\(^5^5\) Neither

\(4^9\) Public Record Office, Correspondence (private letter): Moody to Under-Secretary of State, 28 October 1858, 11072, CO 60/3, p. 368.


\(5^1\) British Museum Central Archive, Original Papers, letter 7936, George F. Angas to the Secretary of the British Museum, Natural History Department, 5 August 1857.

\(5^2\) AMSI, Trustee Minutes, 5 May 1858.

\(5^3\) ibid., 2 June 1858.

\(5^4\) ibid.

\(5^5\) Both Wall and Angas exhibited their month’s progress a month later. Ibid., 7 July 1858.
catalogue was completed and, despite Denison’s efforts, the library’s lack of scientific references was blamed. In September 1858, an anonymous contributor to *The Sydney Morning Herald*, possibly Trustee George Bennett, publicly identified the main obstacle to completing these projects:

> the non-possession by the Museum of works of any authority on physical science necessarily impedes the classification so much to be desired, both by professors and students; and until such works are procured from Europe, a delay to be regretted must take place in the completion of the catalogues.\(^56\)

The criticism was a little disingenuous as the Museum had recently purchased part of the library of naturalist William Swainson. The article may have been strategically placed by the Museum to ensure government support for the Museum’s recent request for library funding. It was quite true, however, that despite Denison’s focus on the need for resources to catalogue museum specimens and his arranging book donations from significant institutional donors in Britain, the AM still lacked essential scientific texts needed by its employees to do their jobs. There appears to have been a complete separation between the libraries of the AM trustees and the staff they managed, and without significant expenditure on books it was difficult to see how work at the Museum could progress.

**An Endowment of £500 for a Library at the Australian Museum**

By mid-1857, the Australian Museum is recorded as having spent less than £5 on book purchases since its establishment. Phillip Parker King’s 300 donated volumes had been accepted by the Board by this time but their value was questionable, Ludwig Leichhardt’s small book collection lay buried beneath a pile of coal in the basement, and Denison had yet to hear back from the Colonial Office regarding his request for publications from the Geological Survey of Great Britain. It appears that it was an offer from the recently widowed Ann Swainson, wife of the naturalist, William Swainson, to sell Denison part of her husband’s library that provided the

---

\(^56\) ‘Additions to the Australian Museum’, *SMH*, 13 September 1858, p. 5.
impetus for the trustees to actively seek funding from the government for library material.57

Prior to informing the Board about Mrs Swainson’s offer, Denison consulted with W.S. Macleay and Macleay suggested that these scientific references would be an excellent resource for species classification, principally because ‘these older works contain the original description of species to which the original names must always be attached’.58 The 227 volumes were delivered to the Museum from New Zealand in early 1858 and it was resolved at the February board meeting ‘that the Government be requested to furnish the funds (£97) necessary for the purchase of Mrs Swainson’s books’.59 In April, the Colonial Secretary confirmed that the Swainson funding was to be placed on the estimates60 and, though it would be another five months before the parliament confirmed the payment, the Board appears to have been emboldened by the Swainson acquisition.61 In the same month, the Trustees prepared their annual report for tabling in the Legislative Assembly and in it laid claim to a museum library:

The Trustees would beg respectfully to call the attention of your Excellency to the importance of providing a library for the reception of the scientific works and drawings belonging to the Museum.62

It was a report that had Denison’s fingerprints all over it and was, in a sense, a memo from Denison to himself as well as his parliament. The Board thanked the Legislature for a previous grant of £2000 with which the Museum building had been completed and the report informed the Governor that plans for a Museum extension had been prepared and submitted to the government. The need for a library had been listed in the document ahead of the request for the laying on of

57 The Governor presented the letter from Ann Swainson to the Board in August 1857. ibid., 1 August 1857.
58 AMS7, Letters Received, F12.50, W.S. Macleay to Sir William Denison, Elizabeth Bay, 21 July 1857.
59 AMS1, Trustee Minutes, 6 February 1858.
60 ibid., 7 April 1858.
61 See Chapter Three for an analysis of the Swainson collection acquired by the AM in 1858.
water to the institution—the ‘necessity’ of that ‘has also become most urgent’—
and emphasised the importance given to this call for intellectual sustenance.63

The trustees moved quickly to prepare for future support from the government
once the request for a library had been made. Denison, W.S. Macleay and Bennett
were instructed to choose ‘the most important and serviceable scientific works
which are published periodically ... and such books as they think necessary’,64 and
presented their list of works to the Board at the August meeting. It is worth noting
that neither Wall nor Angas, both staff working closely with the Museum’s
collections, were asked to officially participate in the process of choosing the
Museum’s literature and that this had been left to experts on the board. At the
same meeting it was resolved that the trustees request £500 from the government
for scientific works.65 The Colonial Secretary acknowledged this request at the
beginning of September and £500 was placed on the budget estimates for 1859.66
Within days Bennett had written to his friend John Gould, on behalf of the trustees,
and enquired about the immediate supply of periodicals and monographs once
funding had been approved by the parliament:

I write to enquire of you on behalf of the Trustees of the Aust. Museum on what
terms the Societies will permit us to have these transactions & proceedings as a
Public Institution, whether on the same terms as Fellows. At all events until we
receive the reply will you send in the case you formed for me the last published
part of the Transactions & Proceedings of the following Societies? - Royal Society
- Linnean Society - Entomological Society - Geological & Zoological Society. Of the
Zoological Society send the last three parts of the illustrated Proceedings also the
last published suppt. of the Birds of Australia & the last part of Aust. Mammalia.
This is all that can be purchased at present but the Governor has placed on the
Estimates £500 for the purchase of works of natural history for the Museum
Library, when it is the intention of the Trustees on the sum being granted to
purchase your Birds of Australia, Aust. Mammalia and will you have the kindness
to send a list of the lowest prices you can afford to supply the Society with them
& whether you would supply us with second hand works on natural history when
written for from the Catalogues and on what terms. Let me know as early as

63 ibid.
64 AMS1, Trustee Minutes, 5 August 1858.
65 AMS1, Trustee Minutes, 7 July 1858.
66 ibid., 2 September 1858.
possible by return of mail as we expect the money will soon be voted & we are desirous of purchasing these works for reference with as little delay as possible.

Hoping soon to hear from you.

Believe me my dear Gould

Your sincere friend

George Bennett$^{67}$

In November, the Board was officially informed that the government had approved the sum of £500 (referred to as the ‘Endowment Fund’ in the Museum’s annual reports) in addition to the funds required for the Swainson purchase, and Bennett was taken up on his offer to find the cheapest copies available of the scientific works previously chosen by the library subcommittee.$^{68}$ There appears no questioning of the potential conflict of interest Bennett may have had in arranging the purchase of books for the library through John Gould, whose publications Bennett represented in New South Wales.

It was not until March 1859 that the Board articulated the method by which the material for the library would be acquired. Both George Macleay and George Bennett planned to travel to Europe in the coming months and had offered to represent the Museum’s business while away. The Board decided that the £500 would be placed at the disposal of Macleay and Bennett, along with Professor Richard Owen, ‘to purchase and select such works as they may consider most useful to the Museum’.$^{69}$ A letter of credit for the money was sent to the Oriental Bank Corporation of London$^{70}$ and the first case of books arrived in Sydney aboard the *Wave of Life* in January 1860.$^{71}$ Six shipments of books were received from London over the next six months, though information relating to individual titles is sketchy and their origins and prices unknown. It appears that five of the cases of

---


$^{68}$ AMS1, Trustee Minutes, 4 November 1858.

$^{69}$ ibid., 3 March 1859.


$^{71}$ AMS1, Trustee Minutes, 5 January 1860.
books arriving during this short period were sent by George Bennett, with the remaining case, containing journal issues and a complete set of *Mammals of Australia*, coming from John Gould.72 Richard Owen’s selection of 39 titles, consisting of 74 volumes, did not arrive at the Museum until December 1861.73 There are no surviving invoices for the book material bought overseas by Bennett, Macleay or Owen though we know that the AM sent vouchers relating to the £500 expenditure to the Auditor General in late 1860.74 The lack of any documentation relating to payments made from the endowment makes it difficult to identify the full extent of the book material purchased, but we have some strong indications from partial listings of purchases in the Board minutes, acquisitions listed in the annual reports for this time, the identification of the first library stamp and when it was used (see Figure 7), and evidence of previous ownership on the books themselves. These sources have been used to analyse the content of the library at this time and will be discussed further in chapter six, ‘Creating the Canon: Developing the AML’s Collection, 1836–1883’.

Figure 7. The first library stamp, purchased 1859.

---

72 ibid., 6 September 1860. The invoice from Gould initially included a set of *Birds of Australia* (£88), but this was removed at the time of sale following communication by George Bennett—see discussion later in this chapter: John Gould to the Australian Museum, London, 16 January 1860, AMS7 F:10 - F:10.80 [Book invoices and book purchase correspondence], 1859–1880, F:10.

73 AMS1, Trustee Minutes, 5 December 1861.

74 ibid., 6 December 1860.
Gerard Krefft versus the ‘Bug and Beetle Killers’, 1860–1874

Denison left a significant legacy at the Australian Museum at the time of his departure for India, in 1861, but the lethargy that so often seemed to afflict the institution threatened to return. Denison articulated part of the problem when writing to Roderick Murchison in 1856, a little less than a year after taking up his position on the AM board:

I am sorry to hear you speak so despondingly of your prospect of promoting science in England; but I know and feel that one is constantly obliged to keep a check upon one’s wishes and aspirations, and to accommodate one’s pace to the jog-trot of society. It is one of the great trials to an earnest man to have to contend against the Luke warmness of friends. Opposition can be met and overcome by the pressure of steam, but the cold wet blanket of pretended sympathy but real indifference, brings down high pressure steam to low pressure, and low pressure to tepid water.75

There is no doubt that Denison had forced the Macleay clan to look momentarily beyond its self-interest and towards an institution that could serve the colony’s scientific needs better. Yet Denison’s appointee, Assistant Curator (and later Curator), Gerard Krefft (1830–81)*, was to struggle for almost fifteen years in a battle with those board members he called ‘slow-going bug and beetle killers’.76 It was a tough struggle between the conservative group of gentlemen who controlled the Board and new museum workers, like Krefft and S.R. Pittard, who were more engaged with the changing scientific landscape.

The battle was not only between the old order of Trustees and museum staff but also between the Trustees and various elements of the NSW parliament. In March 1859, the New South Wales Legislative Assembly debated whether it should allocate £5000 to the Australian Museum to improve and enlarge its building. The main argument against the proposal centred on criticism of the Museum’s

constitution, which had allowed a group of individuals to run the museum in a way that was considered by many as unaccountable and amateurish. Leading the charge was liberal Council member Sir Daniel Cooper who accused the Trustees of gross mismanagement and was supported by Terence Aubrey Murray who declared that it was not men of science, of learning, or of research that were appointed trustees but random individuals ‘who had chanced to catch a beautiful butterfly ... and sent it to the Museum’. With additional criticism from Daniel Deniehy, the liberals declared that there was a need to break the ‘exclusive system’ at the Museum and remove the ‘closed corporation’ and its ‘clique’ management. Anecdotes were fired around the chamber illustrating the disorganised and unprofessional handling of the institution’s collections—Cooper revealing that bullock’s eyes had been used in the eye sockets of a stuffed shark—and condemning an institution where public access was limited to a few hours only two or three days a week. The critics prevailed, the money was voted down and the Museum would have to wait another two years before funds for the much needed building extension were approved.

If these parliamentarians were to be believed, it appeared that little had changed in the eleven years since Alexander Macleay’s death. Those gentlemen making up the unofficial Sydney branch of the Linnean Society had continued to dabble in the zoological, mineralogical, conchological and meteorological sciences and it seems achieved little more than establish a semi-private cabinet of curiosities to be enjoyed by the New South Wales elite, their families and friends. Yet this parliamentary rhetoric, in the protean age of responsible government, inevitably reflected the opposition between liberals such as Cooper, Murray and the radical Deniehy and the conservatives of the old order who ran the Museum. To represent all the trustees of the previous decade as scientific dilettantes was disingenuous on the part of the parliamentarians. The achievements of W.B. Clarke, 

---

78 These included Governor William Denison, the Macleays, the Macarthurs, the Kings, Edward Deas Thomson and Charles Nicholson. For a better understanding of the relationships between some of these Museum Board conservatives see Peter Cochrane, Chapter 26, ‘Denison, Thomson and the “Needy” Men’ in *Colonial Ambition: Foundation of Australian Democracy*, Melbourne: Melbourne University Press, 2006.
George Bennett, Professor John Smith, P.P. King and W.S. Macleay were well known and had been admired by some of these critics. Similarly, the capable contributions of Colonel E.W. Ward of the Sydney Mint, Charles Nicholson of the University of Sydney, former Colonial Secretary Edward Deas Thomson and, most importantly, Governor Denison deserved at least grudging respect. By the time of this parliamentary debate, the Australian Museum had been incorporated, the new museum building had been opened, specimen exchanges had been actively pursued with institutions around the world, and the Board had raised £600 from the government for the purchase of scientific literature for the Museum’s library. Despite these achievements, tensions were to continue between some of the Museum trustees and liberal parliamentarians up until at least the mid 1870s.

After the initial burst of spending during the Denison period, purchases for the new library slipped to a steady but relatively low level and would not see significant growth for almost two decades. The Governor’s departure had left the Museum’s newly appointed curator, Simon Pittard, in fear of a return to the bad old days under the unbridled control of the Macleays:

I am most cruelly disappointed in Wm Sharpe Macleay ... I heard in England that he was bad tempered but he seems to me to be worse than that—evil disposed and delighting in malice. I have not seen much of him, but as to his intelligence, I have not found out anything more than would make a first rate curiosity dealer: he is a catalogue in breeches—that’s all I can make out of his scientific accomplishments ... Such a man is enough to ruin an enterprise wherein he has any influence, and now Sir Wm Denison is gone I fear the Australian Museum must stand still until Wm Sharpe Macleay has shuffled off this mortal coil.

Macleay’s days were indeed numbered and he was soon to retire due to the effects of diabetes. Yet poor Simon Rood Pittard was not to benefit from this change as he was mortally struck down by tuberculosis within months of penning his

---

79 Murray talks of his admiration for the late P.P. King in correspondence with W.B. Clarke and is also on good terms with the geologist himself: ‘I knew Captain King well, and for many years, and held him in the highest estimation’. T.A. Murray to W.B. Clarke, Lake George, 26 April 1856, Moyal (2003), p. 446.


complaint to his mentor, Richard Owen. Trained at the College of Surgeons under Owen, Pittard had assisted in setting up the Histological Department at the Hunterian Museum, had been employed as a health officer in St. George’s-in-the-East and a teacher of practical anatomy at the Grosvenor Place School of Medicine.\textsuperscript{82} Pittard began working at the Museum as Secretary and Curator in March 1860, following his appointment on the recommendation of Owen, and soon received a positive response for a series of public lectures he gave at the AM.\textsuperscript{83}

Pittard’s first lecture was presented in the Australian Museum Library (also the boardroom) but the demand for seats had been overwhelming and it was proposed that future lectures should be shifted to the Great Hall of the museum. \textit{The Sydney Morning Herald} used the opportunity of the inaugural lecture to not only praise the new museum library but also to press for public access to the library’s collection:

> The admission of the public within the doors of the library, hitherto closed to all save the trustees, is a progressive step, which ought to have been taken so soon as the Legislature voted public money for the purchase of books. In addition to the small but valuable collection then in the library of the Museum, Parliament last year voted £500 for the further purchase of works of the highest authority, which amount was transmitted to England to the care of Professor Owen, Dr. Bennett, and Mr. George Macleay, with a request to those gentlemen (the two latter being trustees of the Museum) to select such books as they might deem fit for its requirements. Their selection having been just received from London, is now in course of arrangement; and thus, the nucleus of a first-class library has been formed, which it is to be hoped will be annually expanded by the liberality of Parliament. But, it is to be expected, now, that the public will have free access to the stores of learning which are accumulating at their own expense.

> The building accommodations of the Australian Museum are incommensurate with the true pretensions of an institution which, from the very nature of this vast continent (so abundantly rich in natural products) ought to be one of the first of the world’s repertories of scientific knowledge.\textsuperscript{84}

\textsuperscript{82} \textit{Medical Times and Gazette}, 2 November 1861, pp. 459–60.
\textsuperscript{83} \textit{SMH}, 21 September 1860, p. 5.
\textsuperscript{84} \textit{SMH}, 22 August 1860, p. 5.
The article was, in part, continuing the campaign to raise funds for an expanded Museum, the inclusion of a Free Public Library on the site, as well as a more general call for public access to colonial archival material and the flow of government publications arriving from England. Not only had limited space forced Pittard to initially schedule his lectures in the museum library but *The Sydney Morning Herald* also noted that as ‘the small library is the only department at present available for the labours of the curator and his assistant, it may be excusable that the public have been excluded’. The author was clearly sceptical of the Museum’s intentions, however, and a week later, in an article entitled *Our Hidden Treasures of Knowledge*, in which he was critical of the general lack of access to information resources in the colony, he reminded his readers of the exclusive use the trustees had of their library.85 This call for public access to the library was to be ignored until well into the late nineteenth century.

Dying in August 1861, at the age of 40,86 Pittard had little opportunity to make an impact on the Museum’s library. The one rather poignant trace of the man, which was left languishing on the Library’s shelves, was his personal copy of *The Hygienic Treatment of Pulmonary Consumption* (1857).87 The Curator’s scientific research is also represented in the *Cyclopaedia of Anatomy and Physiology* (1835–59), which had been bought for the AML by George Bennett around the time of Pittard’s appointment, and is the earliest example of the Museum collecting the published research of its staff for the library.88

Not long after Denison’s departure, Bennett and W.B Clarke moved that the Board spend £157 on a list of 13 natural history titles offered by the Melbourne

85 *SMH*, 29 August 1860, p. 2.
86 AMS1, Trustee Minutes, 22 August 1861.
87 B.W. Richardson, *The Hygienic Treatment of Pulmonary Consumption*, London: J. Churchill, 1857. Listed as accession no. 2932 in the library register, Pittard’s ownership was noted and the book transferred to The University of Sydney on 4 October 1919.
88 *The Cyclopaedia of Anatomy and Physiology*, London: Sherwood, Gilbert, and Piper, Paternoster-Row, 1836–1859. Acc. no.: 307. Purchase of this title was noted by the Board, AMS1, Trustee Minutes, 5 July 1860.
bookseller F.F. Baillière.\textsuperscript{89} Whether this purchase was made with remaining funds from the £500 endowment is unclear, but it was the first and last significant investment in books supplied by an Australian bookseller for many years to come. Ferdinand Baillière had arrived in Melbourne from London only six months prior to contacting the AM and this previously unrecorded sale to the museum reflects the business acumen of the 22-year-old.\textsuperscript{90} Baillière came from a long line of booksellers in England and France who had specialised in medical and scientific works. Making the most of his father’s existing business relationship with the National Museum of Victoria, Ferdinand had negotiated payment for £107 worth of books sold to the National Museum only days after his arrival.\textsuperscript{91} The bookseller’s offer of natural history texts to the New South Wales museum a few months later supports Wallace Kirsop’s observation that Baillière ‘was one of the first subject specialists to enter the antipodean bookselling fraternity’.\textsuperscript{92} It seems the local availability of Baillière’s scientific titles, which had first been advertised in *The Sydney Morning Herald* in March 1861,\textsuperscript{93} also caught the eye of W.B. Clarke who received at least one parcel of books from the bookseller in that year.\textsuperscript{94} Baillière tried his luck with the AM again in late 1861 by sending more natural history titles; but the trustees declined the offer.\textsuperscript{95} This refusal to buy may simply reflect the fact that the book endowment had been spent. Other mitigating factors may have been that there was a large backlog of binding to pay for,\textsuperscript{96} that Pittard’s position had

\textsuperscript{89} AMS1, Trustee Minutes, 22 April 1861. These included 16 volumes of the *Natural History of New York* (1842–57), along with works of Blainville, Freycinet, Deshayes, Pictet and Temminck among others.


\textsuperscript{91} ibid.


\textsuperscript{93} ‘NATURAL HISTORY, BOTANY, and MEDICINE (English and foreign) - Mr. F. BAILLIÈRE, of the firm of Messrs. Baillière, booksellers and publishers, of London, has just arrived with a large collection of BOOKS on the above-mentioned subjects, which he offers for sale at London prices.’ *SMH*, 8 March 1861, p. 1.

\textsuperscript{94} A parcel was delivered to the AM for forwarding to Clarke. F.F. Baillière to the Australian Museum, Melbourne, 19 December 1861 AMS7 F:10 - F:10.80 [Book invoices and book purchase correspondence], 1859–1880, F:10.

\textsuperscript{95} AMS1, Trustee Minutes, 7 November 1861.

\textsuperscript{96} The Board passed that ‘the books still unbound in the Museum library be bound [and] a pattern decided upon’. ibid., 3 October 1861.
not yet been filled, and two large cases of books from Richard Owen had arrived at the time of Baillière's offer. A few months later, Clarke and Bennett convinced the Board to purchase a 13-volume set of *Reports and Surveys for a Railroad from the Mississippi to the Pacific Ocean* (1854) reoffered by Baillière at a reduced price.97 The AM did not shop again with Baillière until the late 1870s, preferring to do most of their business with the London bookseller, Trübner & Co.

Baillière's second offer of books had come at a difficult time for the Museum. Assistant Curator Gerard Krefft had been acting in Pittard’s position since August and the trustees were battling with the liberal Cowper government over who had the ultimate power to appoint a new curator. It was another two years before the AM was advantaged by a change of government and the trustees appointed Krefft as curator.98 German-born, Krefft had originally been given the position of assistant curator by William Denison in June 1860,99 appointed just as the last of George Bennett’s crates of books had arrived at the Museum from London. This combination of the 30-year-old zoologist still honing his skills and a newly stocked library proved to be of great advantage to the institution, Krefft producing numerous publications over the next decade.100 It is also noticeable how often the controversies with which Krefft became associated during his time at the Museum were related to the cost and ownership of books.

There are no surviving meeting minutes of the AM book subcommittee for the nineteenth century and the absence of this important record of activity means most evidence of decision making about the library is located in the trustee minutes. As a consequence of being the 'last stage' record of the Museum’s decision-making process, the deliberations and circumstances relating to these

97 ibid., 6 March 1862. This set is still held by the AMRL.
decisions tended to be obscured. A fortuitous decision was made by the Board at the beginning of the 1860s following a spat between Pittard and W.S. Macleay, and ensured a decade of increased transparency. Macleay had questioned the cost of lamp oil used by assistant curator Krefft to undertake his work after hours. The trustees ordered the curator to submit a list of requisitions he required at every board meeting and this included lists of books needed for work in the museum.\textsuperscript{101}

\textbf{The Battle to Purchase John Gould’s Birds of Australia}

In July 1862, Krefft requested that the Board consider purchasing John Gould’s \textit{Birds of Australia} (BOA) as it was ‘much wanted for the purpose of naming a large portion of the ornithological collection’ at the museum.\textsuperscript{102} It comes as a surprise that the Museum did not yet have its own copy of the main reference source on Australian birds, particularly considering that the Board had directed G.F. Angas to prepare a catalogue of the Museum’s ornithological collection four years earlier. This omission appears to have been for no want of trying on the part of Gould’s representative, George Bennett. When Bennett first informed Gould of the library’s impending endowment, on 9 September 1858, he specifically noted ‘the intention of the Trustees on the sum being granted to purchase your Birds of Australia [and] \textit{Aust. Mammalia}’\textsuperscript{103} and both titles appeared on a composite copy of Gould’s most recent invoices prepared for the Museum in January 1859.\textsuperscript{104} The highest costing item, £88 for BOA, however, was removed from the final invoice, while \textit{Mammals of Australia}, costing £31–10–0, was retained. It appears that there was resistance by

\textsuperscript{101} Krefft later recounted the circumstances of the disagreement. In short, Pittard had asked the Board to pay for oil for lamps on Krefft’s behalf so he could continue working at night. W.S. Macleay insisted that Krefft should be able to do all his work between the hours of 10am and 4pm. Krefft had already ordered the oil but was required to return it. ‘In consequence of this squabble a resolution was passed that a ‘Requisition list’ should be handed in at every meeting as to the Curator’s requirements.’ Furious, Pittard only ordered requirements for the Curator’s department and not taxidermy to get a reaction from the Board. Instead, Krefft claims the Board simply ignored the fact that newly stuffed specimens were not being presented at monthly meetings as usual. Krefft, Disposition, 1874[?], p. 5.

\textsuperscript{102} AMSI, Trustee Minutes, 3 July 1862.

\textsuperscript{103} ‘George Bennett to John Gould, Sydney, 9 September 1858’, M2888 John Gould Papers and Correspondence, 1831–79. Mitchell Library AJCP.

some on the Board to spending what amounted to almost 20% of the entire library endowment on one title, especially considering that a number of the Board members owned their own copies. Only four days after Bennett had written his request for a quote on BOA from Gould, *The Sydney Morning Herald* lobbied for a copy of John and Elizabeth Gould’s BOA to be obtained by the Museum:

A copy of their superb work lies on the neglected shelves of the Australian [Subscription] Library; but surely its most appropriate place would be in the Australian Museum, where visitors might compare the specimens preserved by the able curator, with the drawings, displaying the colours of their bright and gorgeous plumage from the pencils of the first of Australia’s ornithologists ... We shall, therefore, content ourselves with expressing a hope, that both [the secretary and curator] will have works of authority placed at their disposal, which will enable them to complete their catalogues with credit to themselves and advantage to the public.

The author of this article displays an insider’s view of the cataloguing activity of Angas and Wall and an intimate knowledge of the extent of the Museum’s book collection that was still closed to the public. The response by some trustees to Krefft’s request for the title, four years later, certainly suggests a history of internal tension regarding this proposed acquisition.

In 1862, Rev. G.E. Turner and George Bennett supported Krefft’s request for BOA and Bennett proposed that the trustees purchase George Macleay’s copy, which had been offered to Bennett for £88. Macleay had resettled in England and left his copy with W.S. Macleay at Elizabeth Bay House. There is no hint that George thought to offer the publication to his former institution for a rate less than that being charged by Gould and Bennett appears to have been content to keep the Gould market buoyant. William Macleay and Randolph Want opposed the motion on the grounds that ‘such a large sum of money ought not be expended for books at

---


106 *SMH*, 13 September 1858, p. 5.

107 AMS1, Trustee Minutes, 3 July 1862.
the present time’. The motion was passed seven to two and a cheque for £88 drawn up. It was reported at the next meeting that W.S. Macleay had refused to accept the cheque until he had instructions from his brother and this suggests William John had communicated his views about the matter to his uncle. William Macleay and R.J. Want moved that the Museum’s offer be cancelled and the cheque torn up. Once again Bennett suggested that the Board should purchase BOA, but this time he proposed approaching John Gould directly and trying for the same price. The matter was not closed until January 1865, when Gould’s receipt for the Museum’s payment for BOA was delivered—some six years after he had been initially asked to supply the work.

It is tempting to speculate why there was apparent reluctance to purchase BOA at the very time the AML was being expanded and the foundation collection purchased. It may be as simple as some trustees feeling that enough access to the work was available through the Subscription Library and the Trustees’ private holdings, or that the AM could buy a copy more cheaply from a source other than the publisher. However, the slowness to purchase this work may also have been indicative of an uncertainty about how the new library was going to be used. The proposal to add a Free Public Library to the Museum’s site was actively being discussed at this time and may have tempered the urge to spend so much money on a title that was bound to arrive anyway. Perhaps most importantly, the request for the publication had come from the museum staff so they could use the reference tool to classify the collection—an entirely different function to The Sydney Morning Herald’s suggestion that the public might like to enjoy comparing examples of the museum’s taxidermy with Gould’s coloured plates. Neither of these suggestions matched the closed gentlemanly interests of some of the trustees and indicates some shift in the purpose for the Museum’s acquisition of scientific literature.

---

108 ibid., 7 August 1862.
109 ibid., 2 October 1862.
110 ibid., 5 January 1865.
G.B. Barton and the Edward Wise Collection of Australiana

By 1866, the new College Street wing of the Museum was structurally complete but the plan for a Free Public Library on the site had not been realised and the AML was still located in the boardroom. Despite the failure to establish a new public library, the Australian Museum stored collections on its behalf and, in 1865, a library of Australian books, pamphlets and newspapers was deposited there for safekeeping. Bequeathed to the New South Wales government by Justice Edward Wise, this extremely rich collection of Australiana was gifted on the condition that the collection was to be placed in the public library once it was established. Although not accessioned by the Museum, the contents of the Wise collection was listed in its Annual Report for 1865. In the following year, journalist and historian, George Burnett Barton (1836–1901)* spent time examining Wise’s library in preparation for his bibliographical study, Literature in New South Wales (1866). Barton explained the importance of the collection to his survey:

However absurd it may seem to say so, it is nevertheless true that there is already a field for literary antiquarianism among us, and more than one antiquarian is vigorously at work. The collection made by the late Mr. Justice Wise, imperfect as it is, amply demonstrates this truth. Without the assistance of that collection, the facts gathered together in this work could never have been obtained.

More significant, however, is Barton’s listing of published New South Wales titles under ‘Physical Sciences’. Every monograph and article listed had been written by a Museum trustee, employee or close associate. It had been Gerard Krefft’s job to provide Barton with access to the Wise collection and it seems likely that he was

112 F.M. Bladen, Historical Notes: Public Library of New South Wales, Sydney: W. A. Gullick, Govt. Printer, 1911, p. 39.
114 AMS1, Trustee Minutes, 2 August 1866.
involved in advising Barton on the main locally-produced scientific texts. Barton’s brief biography of Krefft in the book appears to have been supplied by the curator himself and many of the titles listed were held by the AML. Barton may have been a little over reliant on Krefft’s advice as books that were not in the AML and that he did not list, such as John Lewin’s *Birds of New Holland*, fit Barton’s criteria of books written by authors who had made the colony ‘their adopted country’.

The list of publications written by Krefft in Barton’s book was limited to specimen catalogues and journal articles and his locally-published monographs on snakes and mammals were yet to be written. Barton may well have had a word of advice for Krefft on attempting to publish in Australia and noted that the major monographs in his book had been published in London. While Barton praised the fact that members of the ‘two or three’ scientific societies established in Sydney ‘have not been idle’, he succinctly identified the obstacles faced by local authors such as Gerard Krefft:

> It must be recollected that there are two very strong reasons against publishing in Sydney. The first, is that the expense is nearly twice as great; and the second, that no work published in the Colonies has any chance of finding a sale in London.

Though Barton is focusing on the publication of ‘popular’ literature, his observations on the inability of local publishers to turn a profit should have been taken as a warning by Krefft who was considerably out of pocket after personally paying for the printing of his *Snakes of Australia* in 1869.

---

116 Krefft, as Secretary, had been originally directed by the Trustees to inform Barton of his access granted to the Wise collection. See AMS1, Trustee Minutes, 2 August 1866.

117 Almost all the eleven titles listed by Barton were in the AML at the time of his visit in 1866.

118 Barton (1866), p. 5.

119 ibid., p. 3.

120 Krefft ‘produced *The Snakes of Australia*—the first definitive work on this group of Australian animals—but not without difficulty and personal sacrifice. Unable to find a publisher, he eventually paid the Government printer out of his own pocket—£225 for 700 copies’. Strahan (1979), p. 135.
There is no instance, known to the writer, of any work published in Sydney having met with a large sale, or even a tolerably large sale. The probability is, that every case of publication, not by means of subscription, has involved a loss.\textsuperscript{121}

The Australian Museum's institutional publishing record was comparatively minor until the 1880s and only a handful of specimen catalogues were published. Gerard Krefft, however, made up for this in his time at the AM by writing more than 200 papers and catalogues as well as a number of major illustrated monographs.\textsuperscript{122} Krefft not only actively developed the specimen collections of the Australian Museum, he also embarked on a decade-long conversation with the public of New South Wales through more than 50 newspaper articles published in Sydney.\textsuperscript{123} Throughout the works authored by Krefft there are references to scientific works needed for species identification and texts recommended to those readers who might like to engage more deeply in a particular subject area. However, never does Krefft suggest that Sydneysiders might like to visit the AML. Though Krefft himself embraced the change museums had undergone over the previous 50 years—progressing from cabinets of curiosities to institutions with an educational value\textsuperscript{124}—it seems that Krefft saw the AML as a research facility designed chiefly for the use of museum staff, the trustees and scientific associates.

One such colleague, an ornithologist from Queensland, Sylvester Diggles, had the opportunity to browse the resources available in the AML in 1871. His description of his visit is the first to consolidate hints made about the strength of the collection in the local press some years earlier:

The valuable library of the Institution was also used by me I hope to good purpose. I there had an opportunity afforded me of examining works heretofore only known to me by report, and many a pleasant hour I spent turning over the pages of such authors as Gould, Grey, Temmink \textit{[sic]}, and others on Ornithology; and Dury, Hewitson, Westwood, Sepp, &c., &c., on Entomology. Amidst such a

\textsuperscript{121} Barton (1866), p. 10.
\textsuperscript{122} Nancarrow (2009), p. 151.
\textsuperscript{123} ibid., p. 152.
mass of information, I only regret that much too cursory an examination was all I was able to give to these works, and I longed for the time when we should have a similar library and a similar museum established among us in Brisbane.  

Interestingly, almost all the titles mentioned by Diggles represent acquisitions made with the endowment in the late 1850s and early 1860s and do not appear to include newer literature. While these choices may say more about the interests of Diggles, they do reflect the relatively few acquisitions made during the Krefft period. Of the material ordered during this time, the focus appears to have been on a consolidation of the periodical collection, the targeting of works needed for classification and the writing of the Museum’s catalogues. Chapter Four will explore more deeply Gerard Krefft’s use of the texts available to him and consider how Krefft used this book collection to develop his expertise, confirm his own scientific observations and to challenge those in the British scientific establishment with whom he sometimes disagreed.

**The Removal of Gerard Krefft and Ensuing Malaise at the Museum**

Krefft was a man not afraid to speak his mind and his lack of tact with both his ‘superiors’ and those he supervised left him with few supporters towards the end of his career. A major source of his downfall has been identified as ‘the lack of clear differentiation between the roles of curator, trustees, the museum and the government which paid the bills’, and it was Krefft’s opposition to the Trustees’ use of museum resources to further their own collections that brought him and the Board to loggerheads in early 1874. Following a gold robbery in the Museum on Christmas Eve 1873, the Trustees were intent on blaming Krefft for the theft. Lacking evidence, members of the Board began undermining the position of the curator in other ways. In the February board meeting it was announced that Krefft’s assistant, George Masters, wished to resign and, not long after, he took up a  

---

125 S. Diggles, ‘A Short Account of the Trip to Cape Sidmouth and Back, in the Governor Blackhall’, *Transactions of the Queensland Philosophical Society*, vol.1, 1872, p. 2.


127 Nancarrow (2009), p. 149.
position curating the private collection of trustee, William Macleay.\textsuperscript{128} At this same meeting, Chairman Alexander Walker Scott (1800-1883)* proposed that as ‘the Curator had often complained of being overworked and that he required secretarial assistance’ he would give notice of the following motion:

\begin{quote}
that at the next general meeting of the Board of Trustees I will move that in the opinion of this Board that it is considered desirable that a Secretary and Librarian to the Australian museum should be approved in lieu of the assistant Curator as at present.\textsuperscript{129}
\end{quote}

Krefft immediately disputed Scott’s premise for the motion and stated that he had not complained about having too much clerical work, but needed more assistance with the Museum’s collection. Privately, he wrote to Premier Henry Parkes and warned that Scott was trying to diminish the curator’s position by grabbing the proposed secretary’s position for himself.\textsuperscript{130} Transferring the library duties to a secretary and librarian position indicates some recognition of the significance of the library but Krefft’s view that this was primarily a move to diminish his power seemed justified. At the next meeting Scott withdrew the motion immediately prior to the dramatic announcement, by Capt. Arthur Onslow, grandson of Alexander Macleay, that a detective was waiting outside the room with evidence that Krefft had been involved in the distribution of pornographic photographs from the Museum.\textsuperscript{131} Krefft was accused of permitting the Museum’s photographers, Henry and Robert Barnes, to sell what were little more than ethnographic images,\textsuperscript{132} and would soon lead to his sacking and physical removal from the Museum. Ronald Strahan, in his history of the Australian Museum, has little doubt the photographs had been planted onsite in readiness for their discovery by the police.\textsuperscript{133}

\begin{thebibliography}{9}
\bibitem{128} AMS1, Trustee Minutes, 5 February 1874.
\bibitem{129} ibid.
\bibitem{131} AMS1, Trustee Minutes, 5 March 1874.
\bibitem{133} Strahan (1979), p. 33.
\end{thebibliography}
The stress of the situation is evident in Krefft’s deteriorating handwriting as he continues his account of the actual meeting in the Board minutes. He accused some members of the Board of conspiracy and they responded with further accusations that Krefft had attempted to steal books purchased by the Museum.\footnote{AMS1, Trustee Minutes, 30 July 1874.} Both George Bennett and Rev. W.B. Clarke, two of the most respected scientific minds on the Board, resigned in opposition to the loss of the Curator.\footnote{There has been great confusion in the Museum...I have suggested to [the Government] to do away with the Trustees altogether [:] most of them only look after their own private collections and are a great impediment to the advance of the Museum. It would be difficult to find a Curator to work like Krefft; he has made our Museum the admiration of the scientific visitors. Both Clarke and myself resigned yesterday as you will see by the enclosed paragraph’. George Bennett to Richard Owen, Bennett material in Owen papers, British Museum (Natural History): photocopies (Uncatalogued manuscripts Set 362, ML). Quoted in Strahan (1979), p. 34. The resignations were reported in \textit{SMH}, 3 October 1874, p. 5.} Not only was Krefft’s career destroyed, but two long-term advocates for a strong scientific library at the Australian Museum had departed with him. Krefft’s dismissal was followed by a politically divisive government enquiry and a long and difficult court case. While Krefft was awarded damages, it was a pyrrhic victory as he was unemployed, had been bankrupted, and died in 1881, at the age of 51 years.

The Australian Museum Library remained in stasis for two years following Krefft’s dismissal. On 22 September 1874, the Board had appointed ornithologist and zoologist, Edward Pierson Ramsay (1842–1916)*, as Curator but his appointment was not confirmed by the government until 1876. The Board ceased ordering books from Trübner & Co. in October 1874\footnote{AMS1, Trustee Minutes, 1 October 1874.} and the only library-related activity at the time was an audit of the specimens and books in the museum, which were listed in a ‘catalogue’.\footnote{‘Mr Hill reported that he had finished the catalogue of the specimens, and of the books in the library’. \textit{ibid.}, 30 July 1874.} This listing appears not have survived long because Ramsay reported, in 1877, that as ‘no catalogue of the books in the library was in existence’ he had prepared his own list of books based on book invoices filed at the Museum.\footnote{Unidentified newspaper clipping detailing proceedings of the case Krefft vs. Hill, 1877, in Gerard Krefft Papers, ML A267. Ramsay testifies to the lack of a pre-existing catalogue and that he}
files of book invoices that have survived from the nineteenth century—probably those formed by Ramsay—provide an incomplete record of the early known purchases.\(^{139}\)

Given the achievements of Krefft and the circumstances of his departure, it was inevitable that Australian-born Ramsay would be under pressure to prove himself in the position of curator. Supported for the curatorial appointment by his patron, William Macleay, Ramsay was no doubt a less adventurous choice than his predecessor but ultimately proved his worth. He was considered highly active in his scientific duties, developed the collection extensively through exchanges, described a number of new species,\(^{140}\) and authored many ichthyological papers in addition to his *Catalogue of the Australian Birds in the Australian Museum* (1876–1894).\(^{141}\) As might be expected, Ramsay needed a good library to support his classificatory work and, from 1879 onwards, the employment of additional scientific staff to manage and describe the museum’s ever-growing collections further emphasised this need.

### The Reinvigoration of the AML, 1876–1883

The decision to replace the library’s old ‘temporary shelving’ with bookcases in December 1876 was the first indication of a revived interest in the Australian Museum Library.\(^{142}\) Less than six months later, the Museum Secretary, rather than the Curator as in previous years, ordered approximately £50 worth of new books for the library.\(^{143}\) Following Krefft’s departure, the position of curator and

---

\(^{139}\) The earliest Trübner & Co. invoice is for 1863 and there are other significant purchases made from other booksellers during this period. AMS7, F:11 - F:11.80.

\(^{140}\) Strahan (1979), p. 38.


\(^{142}\) AMS1, Trustee Minutes, 7 December 1876.

\(^{143}\) ibid., 3 May 1877.
secretary had been separated and Ramsay was supported by four different individuals in his first eight years as curator. The Secretary’s library duties were first published by the Museum in 1879 and specified responsibility for:

- keeping record of publications sent or received as donations
- to manage the binding of library material
- to undertake the general charge of the library
- to classify all books
- to have the proper titles of books entered into the Library Catalogue.\textsuperscript{144}

The Curator, however, was ultimately responsible for the AML and in the revised by-laws of 1882, the classifying of the Library’s books was transferred from the Secretary to the Curator.\textsuperscript{145}

Ramsay had shown some enthusiasm for improving the library as early as 1878, when he urged the Board to spend £250 on books he described as ‘all very desirable works and necessary for the efficient working of this Institution’.\textsuperscript{146} The Board deferred its decision on this largest single request for library funds since 1861 and turned to the minutiae of library management—resolving where and how frequently a book should be stamped.\textsuperscript{147} Apparently frustrated by the delay, Ramsay ordered some of the titles from Trübner & Co., in May 1879, without permission from the Board.\textsuperscript{148} When challenged by the Board, he responded that ‘they were urgently needed’ and they had been approved by the ‘Committee of

\textsuperscript{147} ‘It was resolved that a stamp be obtained for marking the books in the Library, the leaves to be stamped at intervals of about 100 pages, and the backs of the plates and other illustrations also to be marked.’ AMS1, Trustee Minutes, 5 December 1878.
\textsuperscript{148} Invoice from Trübner & Co., 12 July 1879 …per the Free Public library Sydney on account of the Curator of the Australian Museum Sydney. E.P. Ramsay—Papers, 1860–1917 MLMSS 7426, Folder 3—Feb 1869 to Aug. 1879.
Books’. Ramsay was warned not to order unauthorised books again, though this was little more than a slap on the wrist given the Board’s decision to approve the purchase of £500 worth of books for the library in the same meeting. Correspondence over the next two years between the Museum and Trübner & Co. reveals ongoing negotiation as the AM attempted to keep its purchases below the £500 limit. Significantly, we see the involvement of Archibald Liversidge (1846–1927)*, AM trustee and Professor of Geology and Mineralogy at the University of Sydney, who was asked to advise on geological texts for the library.

The injection of funds into the library’s collection in late 1879 was the beginning of a new ‘golden age’ for the AML. Between 1880 and 1883 almost £1200 was spent on book purchases and was a sum just shy of the £1390 spent by the museum on books over the previous twenty years. The increase in funds reflected a series of annual book endowments granted by the government for each of these years and reflected a major surge in funding for the Museum overall, which continued up until the Depression of the early 1890s. Repeating the pattern set following the first endowment in the late 1850s, the impending arrival of a major collection of books and periodicals forced the Museum to instigate strategies and procedures to manage this growth: binding was arranged, missing issues of periodicals claimed for, library steps ordered from the Colonial Architect, the resolution that a library catalogue be compiled, and a system established to manage loans to trustees. In October 1880, the book collection was insured for £5000, a cataloguer by the name of Mr Powell appointed for 4 guineas a week, and a new library stamp received from Trübner & Co. During the course of rearranging the Museum in

---

149 AMS1, Trustee Minutes, 2 October 1879.

150 Liversidge noted on a Trübner Invoice: ‘I have noted those geological works to which I think should be obtained: Mr Ramsay should be asked to report upon the others’. Trübner & Co. to the Secretary of the Australian Museum, ‘Report of the approximate cost of the books’, October 1880. AMS7, F:11—F:11.80, [Book invoices and book purchase correspondence], F:11.80.

151 See Australian Museum Reports for the years 1861–1884.

152 AMS1, Trustee Minutes, 15 April 1880.

153 ibid., 1 June 1880.

154 ibid., 5 October 1880.

155 ibid., 19 October 1880.
preparation for the new books, the Secretary had located a ‘large number of old newspapers, Gazettes, Pamphlets and Circulars’ in the AML, which were offered to the Public Library, while a list of duplicate books identified for exchange was printed for distribution.

By April 1882, Ramsay was able to note in his draft history of the Australian Museum for the _Industrial Progress of New South Wales_ that

The Board of Trustees meet twice in each month for the transaction of business in the Board Room where is a valuable Library of useful scientific works.

Yet still the library collection was unable to be accessed through a printed catalogue because the cataloguer, Mr Powell, had been discontinued due to a lack of funds, in January 1881. It was proposed over a year later that the Secretary should ‘complete the catalogue of books in the library ... and have it printed for the approval of the Board’, but the practicality of preparing such a catalogue in addition to the Secretary’s other duties appears not have been considered. Finally, in May 1883, Acting Curator W.A. Haswell (1854–1925)*, recommended a cataloguer, Thomas H. Fielding, to the Board on the advice of the Librarian of the Free Public Library, R.C. Walker (1833–97). Haswell, a young biologist and recently appointed demonstrator in comparative anatomy and physiology and histology at the University of Sydney, had felt unconstrained by the fact he was only acting in Ramsay’s job while the Curator was away in London participating in the Great International Fisheries Exhibition. Not only did he oversee the cataloguing of the library, but Ramsay was also annoyed to discover on his return

156 ibid., 16 November 1880.
157 ibid., 7 December 1880.
159 AMS1, Trustee Minutes, 4 January 1881.
160 ibid., 16 May 1882.
161 Fielding offered to prepare a catalogue for the library at a cost of £50. It was estimated that the project would take six weeks to complete. AMS24, Curator’s Report 18, 10 June 1883.
that Haswell had made numerous changes to the labelling and the classification of the animal exhibits.\textsuperscript{163}

Ever confident of his own skills, Haswell had described to the Board the method by which the library should be catalogued and suggested that rather than employ Fielding, a much cheaper clerical assistant could do it just as easily under the guidance of Haswell. This suggestion was rejected by the Board and Fielding was employed\textsuperscript{164} and the library’s estimated 3,000 volumes, rearranged on their new shelving, were now far more accessible to their users.

Upon the publication of the catalogue, twenty-five years after George Bennett, George Macleay and Richard Owen had selected the first major collection of books with funds provided by the government, questions were asked in the press once more about the closed nature of this increasingly important collection of scientific works:

\begin{quote}
We have received from the Government Printer a very neatly printed copy of the catalogue of the library of the Australian Museum, which has been printed by order of the trustees. A preface says that the re-arranging and cataloguing of the library of the Museum having become necessary owing to the recent great increase in the number of the books, the work has been entrusted to Mr. Thomas H. Fielding, by whom the classification of the books and the compilation of the catalogue have been carried out. The catalogue comprises 178 pages of closely printed matter, and we think it will be news to most persons to know that there is such a large and valuable collection of scientific works in Sydney. Unfortunately there is nothing in the catalogue to show whether those books are available to the public, and if so, upon what terms. If the library is intended to be useful generally, the public should have access to it, and the trustees should cause the conditions to be published.\textsuperscript{165}
\end{quote}

In light of this response to the catalogue, the Museum’s decision to publish seems almost provocative when it is clear that there was no intention that the facility would be open to the public. While I have not located a response from the Museum

\textsuperscript{163} Strahan (1979), p. 39.
\textsuperscript{164} AMS24, Curator’s Report 17, 1 May 1883.
\textsuperscript{165} SMH, 7 March 1884, p. 7.
to these occasional challenges to the AML’s closed-door policy, one can imagine an argument in which it is pointed out that a Free Public Library had been open since 1869 to accommodate any inquiries from the general public, and that the Museum itself offered a reference service through the Curator. In 1883, borrowing of the collection was still limited to trustees and by associates upon request to the Board, but the purpose of the library by this time was centred on the classificatory needs of the museum and the communication of its collections, rather than the individual needs of its board members. There was also a distinct change in who was responsible for choosing book material between the first endowment and the second, shifting from a group of trustees closely aligned with the British natural history establishment, and with no apparent input from the staff working with the museum’s collections, to the choice of material being made by an Australian-born curator with the assistance of local academics advising on their area of scientific specialisation.

Conclusion

Over the course of 35 years, from the death of Alexander Macleay to the publication of the Museum’s library catalogue, in 1883, the institution’s main source of information shifted from the private libraries of the executive to an institutional book collection managed by staff at the Museum. Governor William Denison initiated this change in the 1850s by looking beyond the interests of a few gentleman collectors to a broader agenda that required the expansion of the library. In fairness to those running the Museum, science was a low priority in the colony generally and prospects of progress were limited without vice-regal interest. New literature arriving at the Museum was used as exemplars for specimen catalogues in the 1860s as well as for classification, although conflict over the choice of material within the institution appears to have been relatively common. The gentlemen collectors resisted the direction taken by Denison and the 1860s and ‘70s saw a tussle between the old guard, some of their fellow trustees, liberal parliamentarians and museum staff, such as Gerard Krefft.
Despite this turmoil, the Krefft years are seen as some of the Museum’s most productive and important in the nineteenth century and this work was facilitated, in part, by Krefft’s access to a newly-stocked library. However flawed the management of the Australian Museum may have been, it was during this time that the trustees invested over £2,500 to develop a fine library of almost 3,000 volumes. The protracted, divisive and public sacking of Krefft by the Board in the mid 1870s appears symptomatic of the struggle between a scientifically conservative group and the arrival of the new biological sciences in Sydney. A newer breed of scientist, such as Archibald Liversidge and William Haswell, not only began to serve on the Museum Board in the 1870s, but were actively involved in the selection of literature for the library and the arrangement of the Australian Museum’s first library catalogue. Despite calls to provide public access to this newly-founded natural sciences library in Sydney, there was little interest among most of those on the Board, or among the Museum staff, in sharing with the broader community what had become a rich collection of both modern and historically important texts.

In his introduction to Libraries within Libraries: The Origins of the British Library’s Printed Collections (2009), David Pearson outlines some of the organisational changes libraries in the twenty-first century are undergoing in the face of new information technologies and the increased access to digitised material through the internet.¹ The response to this change has included not only rethinking how users find and access information but also how physical collections are arranged and where they are located. Concurrent with these changes has been the scholarly rethink about how printed texts are written, disseminated and read as well as a growing interest in the material, rather than textual, aspects of books. For example, if only one or two copies of an early scientific publication have been digitised and are available to view online, is there more that individual copies of the publication stored in Australian libraries can tell us about the publication, distribution, use and reception of this work? What are the ramifications of choosing to look only at the digitised copies available?

The challenge then for scholars interested in studying aspects such as provenance, bindings and marginalia in library collections is to gain copy-specific information that is not usually included in standard catalogue records. Relying on physical access to book collections to undertake this type of research is also likely to become increasingly difficult as more books are moved offsite. The highly standardised approach towards library collections employed over many years has inevitably created a collection monoculture within each library, where the periodisation of acquisitions and the histories of the objects within their original groupings are subsumed within the ‘whole’ and are lost or, at least, become very difficult to retrieve. While institutions with dedicated special collections have often addressed some of these issues, and there has been a move among some libraries

with ‘heritage’ collections in both Australia and overseas to provide more copy-specific information on their catalogue records, a lack of institutional recognition of the value of this information and tightening budgets continue to present obstacles.

The two private book collections examined in this chapter are known to have been stored at the Museum by the late 1850s and, while one remains in situ, the bulk of the other was relocated to the State Library of New South Wales in 1902. The breadth of both collections was unknown and few physical examples of these books were readily identifiable or accessible. Initially, I applied a variety of methods to identify the collections before their contents, and context within the history of science in New South Wales, could be considered.

Of the books collected by the AM prior to the 1858 endowment, most can be sourced to the libraries of three individuals: Phillip Parker King, Ludwig Leichhardt and William Swainson. Despite the Macleay family’s dominance over the governance of the AM and its extensive personal holdings of scientific literature, there is no evidence of titles ever being donated by the family to the museum and King’s collection of meteorological, nautical and natural history titles was the only donation of note from a trustee at the time.

Rather than focusing on King’s collection, however, most of which appears to have been deaccessioned prior to the establishment of the AML register, this chapter concentrates on the libraries of Ludwig Leichhardt and William Swainson—both

\[ \text{2 In Sydney, special projects in which provenance and other information has been recently added to library records have been undertaken by a number of libraries and include the Mitchell Library, the Botanic Gardens Library, the Australian Museum Research Library and the Caroline Simpson Library & Research Collection, Historic Houses Trust of NSW. For further discussion about the Historic Houses Trust project and British models see chapter 6 of this thesis and Matthew Stephens, 'The Historic House Libraries Database: A New Look at Early Australian Book Collections', presentation at State Library User Organisations’ Council Forum, Attics, Cellars, Sheds and Boxes Under the Bed: Collecting and Caring for Original Materials, 13 November 2010, retrieved 27 January 2013, <http://www.sluoc.org.au/Historic%20House%20Libraries%20Database.pdf>.} \]

\[ \text{3 While most of the titles listed as King donations in the Board minutes are not listed in the AML’s register (commenced in 1883), some important titles were kept, and have survived.} \]
significant individuals in the fields of exploration and natural history in the second quarter of the nineteenth century and whose book collections, as acquired by the AML, have remained substantially extant. Undertaking these two case studies has been beneficial not only to identify the volumes owned by these two men but also to provide the opportunity to explore the types of literature they favoured as well as evidence of their use of books.

Both Leichhardt and Swainson had associations with the Australian Museum: Leichhardt had interacted with a number of the AM Committeemen as well as being involved with the Museum’s collections in the 1840s, while Swainson had known some of the Museum’s key players back in London in the 1820s and ‘30s and no doubt visited the Museum during his stay in Sydney in 1851. What differentiated Leichhardt and Swainson from P.P. King was their common struggle to feel accepted by the scientific establishment in Sydney, which was dominated by the Macleay family. Both men articulated the barriers they faced in Sydney, though Leichhardt would probably have faced the same social constraints if he had tried to make contact with Swainson while staying in London, as a student, between 1837 and 1838. Leichhardt observed at the time that ‘English people are as inaccessible as their houses’, and marvelled at how letters of introduction provided Leichhardt and his companion with access to the British Museum, the Museum of the Royal College of Surgeons and their libraries, where they ‘gained the immediate attention of important persons who would not otherwise have noticed us’.† Though the two men appear never to have met, Leichhardt would have come across Swainson’s name and scientific illustrations in the literature of the time, and no doubt Swainson followed Leichhardt’s acclaimed exploration of Australia from his new home, in New Zealand. Swainson may have had further personal knowledge of Leichhardt through his friendship with Robert Lynd (1800–1851)*, a lieutenant in the army with an interest in natural history who had been posted to New Zealand


in 1847, and who had previously been a fellow lodger and close friend of the explorer in Sydney.\(^5\)

There is a major difference between the ways in which the AML acquired the Swainson and Leichhardt libraries: the first was the AM’s earliest significant purchase of scientific literature, while the latter requisition was a temporary storage solution on behalf of Leichhardt’s German relatives. One was the result of the considered perusal of a catalogue and some discussion and a viewing of the collection, while the other was simply a storage problem that the Museum took 60 years to resolve. Despite this difference, both libraries offer considerable clues as to their use in Europe and, though there is less evidence of their use in Australia and New Zealand, they certainly indicate the knowledge that their owners brought to the Antipodes. Regardless of the way in which the libraries were acquired, or their subsequent scientific use within the museum, these two case studies demonstrate that each of these collections had a significant personal meaning to key players at the museum such as W.S. Macleay and Gerard Krefft.

**Ludwig Leichhardt’s Library\(^6\)**

More than 150 years after the explorer Ludwig Leichhardt disappeared while on his quest to cross the Australian continent, there continues to be interest in his fate.\(^7\) Equally interesting has been the variation in the telling of this story over time and the changes in its perceived significance.\(^8\) One of the great attractions of the

---


8. For further discussion see Glen Nicholls, ‘Exploration and Immigration: How Intercultural Interpretations are Changing the History of Ludwig Leichhardt’, *Journal of Intercultural Studies*, 122
Leichhardt story is its powerful sense of absence—an ‘ache without a symbol’9—emphasising the explorer’s ‘otherness’: the outsider, the man who could never quite fit. Leichhardt was a Prussian in a British colony, an intellectual in an anti-intellectual environment, a man whose deepest relationships appeared to be with men, a scientist acting in the role of bushman, a dead explorer who reappeared from his grave in 1846, a feted explorer who got lost in 1848, and the ‘good news story’ that went bad during the 1840s Depression. It is little wonder that despite his publications, the wealth of manuscript material he left behind and the numerous commentaries written about him, Ludwig Leichhardt has often been presented as an enigmatic figure.

Considering this mythical treatment of Leichhardt, the man, one might ask what tools have been available to those interested in exploring his scientific work? The richest source of information used by biographers and researchers has been Leichhardt’s letters, diaries, field and lecture notes—most of which are housed at the Mitchell Library in Sydney.10 While the manuscript material has been extremely useful for interpreting Leichhardt’s motivation and actions,11 I suggest that there is another source of information that has been overlooked for more than a century—Ludwig Leichhardt’s personal library. In light of the ‘absence’ that is Leichhardt, the possibility of physically holding his possessions and exploring what was a significant part of his intellectual development offers great potential for further understanding.

---


11 Examples include Roderick (1988), Webster (1980) and papers by D.F. Branagan, Peter Krüger, and Dan Sprod in *Australia: Studies on the History of Discovery and Exploration*, [Frankfurt/Main]: Im Selbstverlag des Institutes für Wirtschafts- und Sozialgeographie der Johann Wolfgang Goethe-Universität Frankfurt/Main, 1994.
The existence of the Leichhardt manuscript papers has been well known since their first appearance in the supplementary catalogue of the Public Library of New South Wales (PLNSW), published in 1906.\textsuperscript{12} That the bulk of this material was sourced from the Australian Museum and transferred between 1902 and 1917 is also well documented.\textsuperscript{13} Less recognised, however, are the existing volumes of published material, which constituted Leichhardt’s personal library and are currently split between the collections of the Australian Museum Research Library, the State Library of New South Wales (SLNSW)\textsuperscript{14}, and an unknown location in Germany.\textsuperscript{15} This case study traces the history of the storage of Leichhardt’s possessions at the Australian Museum following his disappearance; it includes a transcription of an inventory of the ‘Leichhardt Collection of Books’ prepared for the Australian Museum trustees in 1881; it identifies approximately 90\% of the Leichhardt volumes accessioned by the PLNSW following their transfer from the Museum; and it provides the location of 74 Leichhardt volumes and analyses the contents of the library.

\textit{Leichhardt’s Education and Access to Literature}

When Ludwig Leichhardt arrived in Sydney from England in February 1842, he believed that his education and experience in the fields of science could provide him with a leadership role in the colony: ‘My general orientation and my acquaintance with nearly all branches of natural science [should] make it easy for


\textsuperscript{13} Transfer information is documented in the Mitchell Library manuscripts card catalogue and those manuscripts with electronic records on PICMAN (http://www.sl.nsw.gov.au/picman/).

\textsuperscript{14} I refer to the Public Library of NSW (PLNSW) when discussing the Leichhardt collection in the early twentieth century. In discussions of the contemporary collection, I refer to the State Library of NSW (SLNSW).

\textsuperscript{15} Roderick (1988), p. 460, suggests that most of Leichhardt’s possessions were lost in the Garden Palace fire in 1882, however there is no evidence to support this. Sellick and Thiirsch note the transfer of the bulk of Leichhardt’s book collection to the Public Library of NSW in 1902, p. 141.
me to find out about the dispersed efforts [that are being made] in this colony, which encourages me to think that I might succeed in coordinating them’.\footnote{Ludwig Leichhardt to Dr Little, Sydney, 25 March 1842, Aurousseau (1968), vol. 2, p. 455.} While Leichhardt probably had a better scientific training than any person who had previously arrived in the colony,\footnote{Rod Home, ‘Science as a German Export to Nineteenth Century Australia’, \textit{Working Papers in Australian Studies, No. 104}, Sir Robert Menzies Centre for Australian Studies, London, 1995, p. 6.} his ambition was initially frustrated by the self-interest of the fledgling scientific establishment and suspicions of his Prussian origins. His depth of learning, however, was appreciated by such individuals as Reverend W.B Clarke, P.P. King and William Macarthur and was more generally acknowledged when he returned from the Port Essington expedition and was granted the honorific title of ‘Doctor’ Leichhardt.\footnote{Webster quotes newspaper articles praising Leichhardt in 1844, pp.32–33: ‘He was presented as ‘no common man’, not only ‘a scholar, a man of science and a gentleman’ but a person of skill, foresight, coolness, determination and energy, ‘of all men we have seen, the best fitted to enter upon this arduous duty’. In this rush to crown him with every virtue, he was publicly given the impressively vague title of ‘Doctor.’’}

Colin Roderick’s detailed analysis of Leichhardt’s education reveals a thorough Prussian training that provided the skills for both further intellectual development and rebellion against the conventional way of life expected of him.\footnote{Colin Roderick, ‘The Education of an Explorer: Ludwig Leichhardt’, in \textit{From Berlin to the Burdekin: The German Contribution to the Development of Australian Science, Exploration and the Arts}, Sydney: New South Wales University Press, 1991.} Leichhardt graduated from the Cottbus Gymnasium in 1831, at the age of eighteen, with a well-rounded education. He attended university in Berlin and Göttingen, where he studied philology, philosophy and natural sciences, but failed to complete a degree. In England, he conducted private study at the Royal College of Surgeons and the British Museum, before moving to Paris and attending lectures on the natural sciences at the Jardin des Plantes, Muséum d’Histoire Naturelle, École des Mines and the Sorbonne. During ten years of institutional and private learning, Leichhardt put his knowledge to the test by conducting field trips in Germany, England, France, Italy and Switzerland.
Unsurprisingly, Leichhardt read extensively and his notebooks, diaries and letters are filled with references to scientific books and classical and contemporary literature. Remembered primarily as an explorer who triumphed at Port Essington and then vanished on his quest to cross Australia in 1848, Leichhardt had been inspired by the broad scientific vision of Alexander von Humboldt and ‘disturbed by those who specialise in one subject’. Leichhardt drew on his education and field experience to investigate the geology, botany, zoology and meteorology of the regions in which he travelled. Consequently, his reading had a significant effect on his behaviour, and while his success in reaching Port Essington was more likely due to his field experience, it was the well-read Leichhardt who gave lectures, published a journal of his expedition and whose achievement was praised by individuals and groups interested in science in both Australia and Europe.

Conscious of his limited and erratic finances, Leichhardt depended on a variety of sources to access the literature he needed. In Europe, he was a frequent library visitor and copied out sections of text that were of interest. He also relied on the books of his wealthier companion, William Nicholson (1816–1853)*, the importance of which he described to his father in 1836: ‘I have been using William’s splendid books and every one of them is better than a course of lectures’. Once in Sydney, Leichhardt complained that the Australian Subscription Library, though well-stocked in some subjects, had little to offer in the area of natural history. While lodging with Robert Lynd, then Lieutenant of the 63rd Regiment, Leichhardt wrote to acquaintances in Europe about his plans to publish a flora of Sydney. He informed Sir William Hooker* that he had access to Auguste Pyrame De Candolle’s *Prodromus Systematis Naturalis Regni Vegetabilis*

---

22 Ludwig Leichhardt to Dr Little, Sydney, 25 March, 1842, ibid., vol. 2, p. 454.
23 The Botanic Gardens Trust Library in Sydney holds Robert Lynd’s seven volume set of Candolle’s *Prodromus Systematis Naturalis Regni Vegetabilis: sive Enumeratio Contracta Ordinum Generum Specierumque Plantarum hic Usque Cognitarum*, Parisiis: sumpti bussoicorum Treuttel et Würtz, 1824–1839. A note attached to the set, dated 1918, explains that the volumes were lent to William Phillips, botanist of Banks St., Chippendale, for the preparation of Leichhardt’s published account of the Port Essington expedition. The note, written by Phillips’ nephew adds:
and Robert Brown’s *Prodromus Florae Novae Hollandiae et Insulae Van-Diemen*, both probably belonging to Lynd, but requested more titles to cover some of the local plants not included in these books. This sharing of current scientific literature was not only common among the students of natural history in Europe, but essential in the geographically isolated colonies. Leichhardt too was prepared to share his library—whether it was to lend volumes of Goethe’s works to a Mr Priddle in September 1846, *The Chemical Catechism* by Samuel Parkes to James Macarthur, or a book on crustacea to William August Miles, Sydney’s commissioner of police. In 1960, Marcel Aurousseau identified Leichhardt’s signature in seven volumes of Goethe’s *Sämtliche Werke*, which had been lent to Priddle and were for sale through the antiquarian bookseller, Messrs Berkelouw. The appearance of the Goethe volumes on the open book market suggests they never made it back to Leichhardt before his disappearance in 1848 and, along with the six other titles he lent out in 1846, were not packed up with the rest of his library for storage prior to his final expedition.

*‘Taking Every Possible Care of Everything Belonging to Me.’*

In a letter written to James Macarthur four months before his disappearance in April 1848, Leichhardt mentioned that he had left his possessions with James Murphy, who ‘came out with me in the same ship and I can rely upon his taking every possible care of everything belonging to me’. After dutifully meeting this expectation for over five years, Murphy found himself unable to care for the explorer’s property any longer. In September 1853, Murphy wrote to the trustees

`Lynd was a bosom friend of Dr. Ludwig Leichhardt, the explorer, who used these volumes’. That some of the marginalia appear to be in Leichhardt’s hand supports this statement.


25 ML MSS C154, p. 542, L. Leichhardt, *Notebook used by Leichhardt in 1842*. Leichhardt lists 7 titles he had lent to acquaintances in 1846. The books were described as follows: ‘Beudant Minerologie to Mr James Macarthur of Arthur sleigh [sic] the 7th Septbr 1846; Parkes Chemical Analysis to Mr J. Macarthur 8th Septbr 1846; Priddle 18th 23r vol. Goethe works 12th Septbr 1846; Priddle Uhland’s Gedichte; Köhlus[?] Technische Chemie to Mr. Luther; Luther Gothes [sic] saemmtliche Werke...; and Miles (Commissioner of Police) - I shall lend him Milne Edwards work on the Crustaceae’.


of the Australian Museum requesting that he hand over a ‘number of boxes containing specimens of natural history, books etc’ belonging to Leichhardt.\(^{28}\) The Board accepted responsibility for the property, resolving that it ‘be deposited for safety in the Museum for the benefit of the relatives of the late Dr. Leichhardt’.\(^{29}\) Importantly, at no point did the Museum formally accession Leichhardt’s possessions, but rather it agreed to take care of the trunks until a member of his family claimed them.

Almost a year after the museum had accepted the Leichhardt material, Rev. W.B. Clarke, geologist and museum committee member,\(^ {30}\) prepared a brief report describing the contents of the trunks. He makes reference to the printed material present: ‘Books in various languages consisting of botanical, scientific, literary and theological works, of which the treatises on the various branches of physical science would be valuable additions to the Museum Library. There are also several pamphlets’.\(^ {31}\) This is the first documented suggestion that the Museum might consider accessioning some of Leichhardt’s books for the library.

It is uncertain how widely known it was that Leichhardt’s property was being stored at the Museum, but in 1857, Alexander Flood, of Newcastle, sent the Museum Secretary a parcel, ‘with the view of preserving the accompanying letters written to me by the great scientific explorer of this colony Doctor Leichhardt’.\(^ {32}\)

\(^{28}\) AMA: N:53, James Murphy to the Museum Trustees, 20 September 1853. See AMS24, Curator’s Report 1, 1917. Most of the previous Leichhardt-related documentation from 1853 onwards has been attached to this report.

\(^{29}\) AMS1, Trustee Minutes, 1 October, 1853.

\(^{30}\) Clarke and Leichhardt spent considerable time together discussing issues of geology and natural history, and Clarke expended effort in memorialising Leichhardt following his disappearance. Clarke’s correspondence with and about Leichhardt is well documented in Moyal (2003).


\(^{32}\) AMA: E:30.57/1, Letter from Alex. Flood to the Australian Museum Secretary, 29 October 1857. Attached to AMS24, Curator’s Report 1, 1917. Flood’s Leichhardt correspondence was noted as missing from the Museum in 1917 and may have been among the Leichhardt letters sold by Annie Krefft, wife of Gerard Krefft, to Angus and Robertson in 1895. See Annie Krefft to Messrs. Angus and Robertson, Sydney, 24 March 1895, Gerard Krefft Papers, ML A263.
No significant further mention was made of Leichhardt’s possessions until 1874, when the Museum’s curator, Gerard Krefft (1830–1881), mailed some of ‘Leichhardt’s notes’ to the Premier of New South Wales, Henry Parkes. Krefft was responding to recent claims by Andrew Hume that he had met a surviving member of Leichhardt’s party, August Classen, in the Northern Territory and that he had a bundle of papers, a telescope and other relics in his possession. Leichhardt’s belongings had been carelessly stored at the Museum and Krefft describes to Parkes how they were discovered under a coal pile in the Museum basement:

I send you some of Leichardt’s [sic] notes (his summary of the Expedition) which I found among our rubbish heaps in 1860. Dr Pittard asked me to take care of them for him because John Murphy, one of Leichardt’s [sic] early companions had told him that he sent all Leichardt’s [sic] papers to the Museum as he could not look after them any longer.—The way in which they were dug out of all sorts of ‘rubbish’ was a caution to ‘people who have to keep museums in order’…anyhow by making these people burn coal-shiftings [sic] we came across Leichardt’s [sic] plants and papers and as they were never ‘presented’ to this institution [they] were handed over from Murphy to Pittard and from Pittard to me.

When writing of Leichhardt’s possessions seven years later, Krefft’s emphasis had changed. He did not find the trunks because of his great economy and demands to burn the coal siftings, but rather it was in response to a request from the former curator, Simon Rood Pittard, while on his sickbed:

Sometime before his death Dr. Pittard called me to his bedside and said, ‘I have a request to make of you. Angas has handed over Leichhardt’s things to me, but I do not know now where they are. You know some of his people in Germany, and if they claim them let them have them.’ I had the cellar cleared out of a mountain of coal and a lot of rubbish, and sure enough we found the cases.

It is evident that the Leichhardt material was a millstone around the neck of the Museum and, in an institution where lack of storage has always been an issue, it

34 Roderick (1988) describes the so-called discovery of Leichhardt’s relics, p. 502.
was relegated to the basement. Krefft, however, is not simply highlighting the incompetence of his predecessors in this story, but also illustrating how the Leichhardt material was never formally accessioned by the Museum and was simply handed from one curator to the other. It was an ongoing sore point for Krefft, who was physically evicted from the Museum premises in September 1874 following his dismissal by the Museum Board. Krefft felt that he owned the Leichhardt books and manuscripts and appears to have used one of the books as evidence in a case for compensation for the loss of his personal possessions when evicted from his lodgings at the Museum. On the front endpaper of Leichhardt’s copy of *Vues et Coupes des Principales Formations Géologiques du Département du Puy-de-Dôme* by Lecoq & Bouillet, Krefft writes:

No.11. This is one of the many volumes of the explorer Leichhardt handed over to plaintiffs care at Dr Pittard’s death who received the books from Mr G.F. Angas late secretary of the Museum & Mr Pittard’s predecessor—Dr Leichhardt has left the books with his former companion the late Mr John Murphy & not with the Museum Trustees. There is no record in the minute book about them. GK’.

As we have seen previously, there are a number of mentions of this material in the Museum’s minute book and the Board did agree to accept the trunks on behalf of Leichhardt’s family. Krefft, however, was adamant that lack of interest on the part of the family meant he was the owner by default: ‘All the remains are really my property, and the few of his relations still living would not pay 20 marks (the freight) for them’.

Krefft’s final public claim to Leichhardt’s possessions came following the offer by the *Bulletin*, in December 1880, of £1,000 reward to anyone who could find the

---


38 Krefft (1881), p. 205. Leichhardt’s sister, Henrietta Schmalfuss, petitioned the NSW government for financial assistance in 1881 and was granted £500. In 1882 she requested further payment and requested ‘news of the discovery of the effects of my brother’s diary, &c., also letters, and his sad end’, New South Wales. Legislative Assembly. *The Late Dr. Leichhardt: Acknowledgement of £500, and Further Application for Assistance from the Sister of*. 1883.
relics of Leichhardt’s missing party.\textsuperscript{39} In late January 1881, Krefft wrote a tetchy letter to the editor of the \textit{Town and Country Journal} responding to reports a fortnight earlier that a John Skuthorpe had found a telescope, both Leichhardt and Classen’s journals and a number of other relics in a good state of preservation.\textsuperscript{40} Krefft dismisses these claims as ‘about as truthful a bush yarn as the discovery of the ’Mudgee diamond’’ and points out that Leichhardt’s relics are at the Australian Museum. He describes the manuscript material in some detail and notes that after this material was dug out of the coal pile in 1860, some of it was put on display in a specially constructed case. Krefft claims ownership of the Museum relics a number of times in the letter and finishes off by stating –

\begin{displayquote}
I do not think any person living knows as much about Leichhardt as I do, and I think that before other persons meddle with these relics, I shall have an opportunity of seeing them.\textsuperscript{41}
\end{displayquote}

While Krefft seems to be referring to the recently discovered Skuthorpe relics here, he appears to conflate the two lots of relics and is staking his claim to the Museum’s Leichhardt material as much as his right to view Skuthorpe’s so-called discovery.

The claims made by Krefft did not go unnoticed by the Museum, and three days after Krefft’s letter appeared in the press the Board moved that an inventory of the Leichhardt material be prepared. The report was presented to the Board on 15 March, 1881, but news of Krefft’s death on 19 February no doubt took the heat out of the issue and once again the problem of what to do with Leichhardt’s possessions receded.

In his first curator’s report for 1902, Robert Etheridge (1846–1920)* once more raised the issue of Leichhardt’s books and plants:

\begin{displayquote}
For many years past a number of books on general subjects, 95 works in all, and some dried plants, the property of the explorer Leichhardt, have reposed here.
\end{displayquote}

\begin{itemize}
\item \textsuperscript{39} ‘The Fate of Leichhardt’, \textit{Bulletin}, vol. 4, no. 48, 25 December 1880, p. 1.
\item \textsuperscript{40} ‘The Fate of Leichhardt’, \textit{Town and Country Journal}, 15 January 1881, p. 112.
\item \textsuperscript{41} Krefft (1881), p. 205.
\end{itemize}
The space occupied by these books is now urgently needed for library purposes, and I suggest for the Trustees’ consideration the advisability of transferring the books to the Public Library, and the plants to the Herbarium of the Botanic Gardens.42

On 4 February, the Board approved the transfer of 124 volumes and an unknown number of ‘pamphlets’ that the museum believed constituted the Leichhardt collection.43 Leichhardt books that had been previously accessioned by the AML were not transferred, with 13 volumes officially retained, including a French translation of Watkin Tench’s *Narrative of an Expedition to Botany Bay*, published in 1789.44 Further Leichhardt manuscripts were discovered in the museum’s strong room in 1917 and transferred to the PLNSW, including the explorer’s field journal of his expedition to Port Essington.45

Once the release of the book collection had been approved by the Museum Board in February 1902, the transfer was swift. The PLNSW began accessioning Leichhardt volumes on 18 April, with most of the books processed by 23 April.46 Unfortunately, early archival records for the library are scant and neither book registers, nor any known list of the books created by the PLNSW have been located.47 Adding to the challenges of relocating the collection was the decision by the PLNSW Trustees not to retain all the Leichhardt volumes. On 15 April 1902, the Library Council minutes note –

None of the books were of any intrinsic value [and] most were College text books and Classic authors, many being odd volumes, unbound, and otherwise imperfect. Resolved that all manuscript work-books and any volumes of any use to the Library be retained, and that the others, interesting only in having the great

42 AMS24, Curator’s Report, 31 January, 1902.
43 AMS62, Exchange Schedule no.19, 1902.
44 In 1955, five of these 13 volumes were transferred to the PLNSW.
45 AMS24, Curator’s Report 1, 1917.
46 See Appendix F, Parts 1 and 2 for details of when titles were accessioned by the PLNSW.
Explorer's autograph, be offered to the German Consul as mementoes of this eminent German.48

A month later, the Principal Librarian, H.C.L. Anderson (1853–1924)*, informed the Trustees that ‘the German Consul-General had gladly taken charge of 45 college text-books and classics containing Leichhardt’s autograph for transmission to Germany’.49 Not only had the Australian Museum been unable to ascribe any significance to a collection of papers and books that had belonged to one of Australia’s most significant early scientists, but the Public Library could do little more than view the value of the book collection through the prism of the explorer’s nationality. Neither the Museum nor Library bothered to mention the collection transfer in their annual reports for 1902.50 To give both institutions their due, not only were they struggling under a severe shortage of storage space, but Leichhardt’s position in Australian history was at a crossroad—he had been dead for half a century and there were few people left alive who had experienced the excitement of his return from Port Essington or the intrigue of his disappearance first hand. By the beginning of the twentieth century Leichhardt’s name had been sullied somewhat by the survivors of his earlier expeditions, and E.M. Webster notes the increasingly difficult fit that Leichhardt, the ‘scientist explorer’, had with the ‘bushman explorer’ of the post-1880s popular imagination.51

48 ML, Library Council of N.S.W., Council Papers 1900–1912, Minutes of the Trustees of the Public Library of N.S.W., 15 April, 1902.
49 ibid., 20 May, 1902. ML Enquiries about the location of the books transferred to Germany have failed to locate their whereabouts. While neither the Deutsche Nationalbibliothek, Leipzig, the Deutsche Staatsbibliothek, Berlin, nor the Universitätsbibliothek Goettingen believe they hold the missing Leichhardt volumes, the manuscript department of the Staatsbibliothek zu Berlin has correspondence relating to their arrival in Germany in 1902. The ‘Minister der geistlichen Angelegenheiten’ sent a box of books belonging to Ludwig Leichhardt to the then KöniglicheBibliothek and asked the library to appraise the collection [SB Runderlaß—U I. 13815 and SB Runderlaß—U I. 14398]. The library responded by making a list of eight Leichhardt titles which they did not hold, but rejected them on the grounds of their poor condition [SB "Acta III E22" fol.145 -151]. These titles consisted of the following items listed in the transcription of the inventory in Leichhardt Appendix F, Part 1: nos. 11, 88, 41, 19, 21, 53, 46 and 14. Bibliographical information in this list has been added to the transcription notes.
51 Webster, pp. 373–74.
The lack of detailed documentation relating to the transfer of the library to the PLNSW and subsequent dispersal of the library within the general collection has made identification of the Leichhardt collection exceedingly difficult. While a few titles belonging to Leichhardt are accessible through the SLNSW electronic catalogue, short of checking every card in the SLNSW card catalogue and reading the entire *Supplementary Catalogue of the Public Library of New South Wales, Sydney, for the Years 1901–1905*, identification has not been possible. In the next section we will see how the inventory of Leichhardt’s possessions prepared by the Museum in 1881 provides us with the earliest known listing of his book collection, and offers an opportunity to locate existing volumes.

**The 1881 Inventory of the ‘Leichhardt Collection of Books’**

On 1 February 1881, the museum trustees directed the curator, E.P. Ramsay, to prepare an inventory of ‘all books, papers, pamphlets, instruments, botanical specimens, journals, private papers and other relics belonging to the late Dr Leichhardt’, while the Secretary, C.R. Buckland, was instructed to ‘look up any minutes in reference to the receipt of such articles by the Trustees’. The Board was presented with the report on 15 February but its reading was stood over until the next meeting at the beginning of March. The Board was not satisfied with the lack of detail presented to it and ‘a more minute record of the relics was ordered to be made, and all articles to be removed from the cellars.’ Once again it was emphasised that ‘a list of the books to be also made out.’ Ramsay may have felt that the effort required to list the entire collection was unjustified and had initially presented a brief summary in the document of less than half a page. The extended document of fourteen handwritten pages was finally presented to the Board on 15 March.52 (See Figure 8.)

---

52 AMS1, Trustee Minutes, 1 and 15 February; 1 and 15 March, 1881.
Figure 8. ‘List of Books, the Property of the Late Dr. Leichhardt, in the Museum Library.’

Ticks and crosses marking titles in the inventory suggest that it was used by the Museum to process the Leichhardt material for transfer to the Public Library. In 1902 the document was prefaced with a typed title page, *Papers Relating to the Leichhardt Collection of Books at One Time in the Museum and Now in the Public Library of New South Wales* and concludes with a page identifying which registered Leichhardt books in the AML were not transferred. The inventory itself was transferred to the Mitchell Library in 1955 and now bears the shelf mark of A3938.

The 1881 sections of the inventory are handwritten in three different hands and are relatively easy to read. My analysis of the transcription has enabled me to divide the document into the following six sections (see Appendix F, Part 1 for a full transcription):

Section 1: Instructions by the Board for an inventory of Leichhardt’s possessions; transcriptions of mentions of Leichhardt articles in AM board minutes; brief inventory of Leichhardt ‘relics’.

Section 2: ‘List of Books, the property of the late Dr. Leichhardt, in the Museum Library’.

Section 3: ‘List of Dr Leichhardt’s books in the Museum but not in the Library’.

Section 4: This section of the report is in different handwriting and includes a number of titles published after Leichhardt’s death. Most of the books relate to Braunschweig, the birthplace of Gerard Krefft, and I suggest these volumes belonged to Krefft at the time he was forcibly removed from the museum in 1874. While many of the titles were transferred as ‘Leichhardt books’ in 1902, I have excluded them in most of my analyses of the collection.

Section 5: A list of manuscripts belonging to Leichhardt. These have not been included in subsequent analyses.

Section 6: ‘The Leichhardt [sic] Books were transferred to the Public Library...
Museum documentation relating to the Leichhardt collection provides little assistance in accurately quantifying how many books constituted Leichhardt’s library. As Table 2 shows, even the documents used for the transfer to the Public Library are difficult to reconcile. Adding to this difficulty is the fact that the Leichhardt books remaining at the Australian Museum had not been identified until recently and the State Library has added few of the Leichhardt volumes to its electronic catalogue.\(^{53}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Source</th>
<th>Titles</th>
<th>Volumes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1881</td>
<td>Brief inventory. ML A3938</td>
<td>Unspecified</td>
<td>77 in library. 22 bound in tin box. 55 unbound in tin box. 154</td>
</tr>
<tr>
<td>1902</td>
<td>Curator’s Report. Jan. 1902.</td>
<td>95 works</td>
<td>Unspecified</td>
</tr>
<tr>
<td>1902</td>
<td>Minutes of the PLNSW Trustees, 20 May 1902.</td>
<td>Unspecified</td>
<td>Approx.136 vols. (91 accessioned; 45 given to the German Consul; plus ‘a few rejected’).</td>
</tr>
</tbody>
</table>

Unless a more detailed and accurate listing of Leichhardt’s possessions emerges, it is unlikely that an exact listing can ever be compiled. However, the 1881 inventory is the earliest detailed listing known and the aim of transcribing the inventory is to

\(^{53}\) In 2003 I identified and located eight of the Leichhardt volumes still in the AMRL using Papers Relating to the Leichhardt Collection of Books and curated a display of these at the AMRL. See John Huxley, ‘Found - Not Leichhardt, but his Atlas’, SMH, 12 September 2003, p. 5.
try and identify as many of the titles listed as possible and physically locate them in either the AMRL or the SLNSW. The challenge of this exercise has been to accurately identify the titles on the original list, many having been considerably abbreviated: ‘1 vol. Schiller’, for example.

**Identifying the Volumes**

Having prepared a transcript of the inventory, a variety of different strategies using catalogues and accession registers was employed to identify titles and locate volumes in the AMRL and the SLNSW. Table 3 compares the estimated number of titles and volumes listed on the inventory with the number of titles and volumes that I have physically located. Of sections two to four of the inventory, which list published titles, 61 titles of an estimated 110 possible titles (55%) have been physically identified, and 79 volumes of an estimated 164 volumes (48%) have been found. As previously discussed, given that few, if any, of the books listed in section four belonged to Ludwig Leichhardt, this section will not be included in further analysis.

While the purpose of this exercise has been to identify published books listed in the 1881 inventory, additional titles known to have belonged to Leichhardt were

---

54 Different strategies were required to identify and locate volumes for each of the institutions. **AMRL:** Strategies used were: 1) to locate books listed by accession number in section 6 of the transcript (Nine volumes were immediately located in this way. A further four volumes had been transferred to the State Library in 1955 and were subsequently identified.) 2) to check titles not found at the SLNSW against the AMRL’s electronic catalogue, card catalogue and library register. **SLNSW:** most of Leichhardt’s volumes are located at the SLNSW and internal documents confirm that 91 volumes were accessioned in 1902. Many of the titles listed on the inventory are in French and German and are heavily abbreviated. I employed the following strategy to identify them: 1) I searched the electronic catalogue for any books provenanced to Ludwig Leichhardt (six titles listed). 2) I checked the association card catalogue in the Mitchell Library (two titles listed). 3) All titles with enough author or title information were initially checked on the electronic catalogue. 4) All entries were then checked on the State Reference Library (SRL) card catalogue. 5) Entries that were not producing results were then checked on the KarlsruherVirtuellerKatalog, a catalogue produced by the Karlsruhe University Library which enables federated searching across most major international libraries (http://www.ubka.uni-karlsruhe.de/hylib/en/kvk.html). Many titles were identified this way, rechecked on the SRL card catalogue and located. 6) *The Supplementary Catalogue of the Public Library of New South Wales, Sydney, for the Years 1901–1905*, which identifies Leichhardt books as ‘[Leichhardt relics.]’, was checked for unidentified entries and six further titles were located.
identified and located during the course of this research (Appendix F, Part 2). The rich source of Leichhardt manuscript material held by the Mitchell Library provides considerable opportunity to document titles read by Leichhardt. However, while some of the books mentioned in his diaries and notebooks do appear in the inventory (see the following section describing the library), many more are not listed and may have been discarded or belonged to others. This is perhaps not surprising given that Leichhardt was often on the move.

Table 3. Inventory: Number of Books Located in Sections 2, 3 & 4

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Number Estimated</th>
<th>Number Located</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Titles</td>
<td>Volumes</td>
</tr>
<tr>
<td>Section 2*</td>
<td>72</td>
<td>91</td>
</tr>
<tr>
<td>Section 3</td>
<td>18</td>
<td>37</td>
</tr>
<tr>
<td><strong>Subtotal of 2 &amp; 3</strong></td>
<td><strong>90</strong></td>
<td><strong>128</strong></td>
</tr>
<tr>
<td>Section 4</td>
<td>20</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total of 2–4</strong></td>
<td><strong>110</strong></td>
<td><strong>164</strong></td>
</tr>
</tbody>
</table>

*Two volumes of bound Leichhardt manuscript notes are not included in the section two totals.

It is with considerable confidence that we can say that the 137 volumes or parts listed in both sections two and three of the inventory (128 vols.) and Appendix F, Part 2 (9 vols.) belonged to Ludwig Leichhardt. A breakdown of books that were listed in these sections and have been physically located is illustrated in Table 4.

---

55 The books listed in Appendix F, Part 2 were located in a number of different ways: the State Reference Library electronic catalogue (1 title); unlisted volumes of a multi-volume title included in the inventory (2 titles); and titles listed in The Supplementary Catalogue of the Public Library of New South Wales, Sydney, for the Years 1901–1905 (4 titles). Some Leichhardt books were tentatively identified but not physically located and have not been included in Appendix F, Part 2. These additional books were ‘Five volumes on natural history in general with plates. Known to be Leichhardt’s. His name has been torn or cut out of them. The vol. on Birds contains reverse impression of Leichhardt’s name on first leaf.’ AMS7, BB30.77/5, Charles Robinson, Secretary to Department of Justice and Public Instruction, 14 August, 1877. Report of the Subcommittee on the private property of Mr Krefft in the museum, Leichhardt Appendix C. Another seven volumes are listed in ‘books lent!!’ in 1846 from A Notebook Used by Leichhardt in 1842, p. 542. ML C154 (see footnote 26), and there is a reference in Roderick (1988), pp. 176–177, to ‘Blainville’s book on classification’ (2 vols.) which was lent to Rev. Charles Wilton by Leichhardt on 25 September 1842.
Table 4. Total Leichhardt Books Located (Sections 2 & 3, Appendix F, Part 2)

<table>
<thead>
<tr>
<th></th>
<th>Titles</th>
<th>Volumes</th>
<th>Signed Vols.</th>
<th>‘Leichhardt Binding’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>50</td>
<td>65</td>
<td>40</td>
<td>41</td>
</tr>
<tr>
<td>Appendix F, Part 2</td>
<td>4</td>
<td>9</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54</strong></td>
<td><strong>74</strong></td>
<td><strong>45</strong></td>
<td><strong>42</strong></td>
</tr>
</tbody>
</table>

Of the 74 volumes located, 66 were at the SLNSW, with the remaining eight found at the AMRL. Leichhardt has signed 45 of these volumes, while 42 of the books are uniquely bound in binding ordered by the Museum prior to the collection’s transfer. In summary, 60 of the 74 volumes identified are either signed by Leichhardt or bound in a way unique to the Leichhardt collection, or both. The remaining volumes have been identified either because they belong to multi-volume sets in which at least one volume has been signed, their accession numbers matched those books ‘not transferred’ to the PLNSW in section six of the inventory, or they were previously unknown volumes identified as ‘[Leichhardt Relics]’ in the PLNSW supplementary catalogue, 1901–05. As a result of my identification of Leichhardt’s titles, the SLNSW and AMRL have identified the provenance of these texts on their electronic catalogues and both institutions have amended or created new records using this information.

A Description and Subject Analysis of the Library

Access to an inventory of Leichhardt’s library has provided us with a unique opportunity. It offers a glimpse into the world of a German immigrant, a man who lived a peripatetic existence, and an Australian explorer who left all his

---

56 The recovery of these 66 volumes at the SLNSW, plus the 14 additional volumes listed in section four of the inventory means that 80 volumes transferred from the Museum to the Library as ‘Leichhardt Relics’ have been identified. Considering that the Trustee Minutes for 20 May 1902 reveal that only 91 volumes were retained by the PLNSW, I have located 88% of those books still held by the SLNSW. The proportion recovered may be higher if we account for the possibility that multiple volumes bound together as one volume were originally counted as separate volumes.

57 Electronic bibliographic records for the titles I have identified as having belonged to Leichhardt at the SLNSW have since been linked together by the subject heading: ‘Ludwig Leichhardt Collection’. Titles at the Australian Museum are identified by an added author entry: ‘Leichhardt, Ludwig, 1813-1848, former owner’.
possessions neatly packed before disappearing into the desert in the mid-nineteenth century. The trunks stored at the Australian Museum in 1853 were a time capsule that appears to have been relatively intact when listed some thirty years later. Locating 74 volumes of Leichhardt’s library in the SLNSW and the AMRL has given us a good opportunity to assess the physical and intellectual content of the collection.

It comes as no surprise that most of the books located were physically small. There is no book larger than a quarto, with many 12mo and some as small as 32mo. Leichhardt provides a clue to the diminutive formats of his library in a letter to William Nicholson: ‘You and I had been wandering from place to place for six whole years, like migratory birds’.58 We not only know from his diary and letters that he was an avid reader, but his complaints about the taxes imposed on his books when he tried to bring them into England from Germany in 1837 are evidence that he carried his library with him.59 Few of the books identified as belonging to Leichhardt have their original binding, and while a small number are in generic library binding common to the PLNSW and the AML, most are of a distinctive design that appears to have been specially ordered by the Australian Museum. Almost all the books located in section two of the inventory have been bound in what I call the ‘Leichhardt binding’ (Figure 9). These books were stored in the museum library and it is likely that they were rebound prior to their 1881 listing because those Leichhardt books on the list but not rebound in this way missed out because they had been separated and were stored elsewhere in the museum. The most distinctive features of the binding include a blue grained cloth, at least four raised bands on a calf spine, either two or three blind-stamped flowers of five petals between the bands on the spine, and identification of Leichhardt’s ownership at the base of the spine in gold-tooling varying from ‘Leichhardt’, ‘L. Leichhardt’ to ‘Ludwig Leichhardt’. At least five different marbled papers were used for the endpapers.

59 Ludwig Leichhardt to F.N. Classen, Clifton, England, 22 May 1837, ibid., vol. 1, p. 50.
Figure 9. Example of ‘Leichhardt binding’.

As mentioned previously, more than half of the books viewed have been signed by Leichhardt, though sometimes only the shadow of his signature remains. Almost a quarter of the titles sighted display Leichhardt’s marginalia and text marking in soft pencil or ink, but much has been lost by the trimming of the text-block during later rebinding. While many of these notes had been made on what appear to have been Latin and Greek texts from his school years, there are also clues to Leichhardt’s interests and work processes in some of his scientific texts. The copy of Mérat’s *Nouvelle Flore des Environs de Paris* (1836) is heavily annotated with lists of scientific plant names—many of which have been crossed out—and suggests a process assisting in identification. Similarly, passages marked in Bouillet’s *Description Historique et Scientifique de la Haute-Auvergne* (1834) indicate places and geological forms that may have been of particular interest to Leichhardt. Further examination of the markings and notes contained in these works may cast further light on the interests and methods of study employed by Leichhardt.
To better understand the content of Leichhardt’s library, I have allocated a general subject heading to each title listed in sections two and three of the inventory and Appendix F, Part 2. I have chosen broad subject areas as defined by the Dewey Decimal Classification (DDC) system so as to accommodate those titles that could not be identified but had clear subject areas: e.g., ‘German Grammar’—which I have categorised as ‘Languages – German’. In all, 90 of a total of 95 unique titles in these sections were categorised by subject. In addition to allocating a subject area to each title, I have noted the language in which it was written and these results have been summarised in Table 5.

One must proceed with caution whenever attempting to draw meaning out of a group of books that are supposed to represent the library of an individual. Unequivocal identification is often difficult and books are no doubt absent from the list that may have had much greater importance to Leichhardt. Consequently, any analysis of Leichhardt’s collection of books describes nothing more than what was listed on the inventory or has survived, though some inferences can be made using information available in Leichhardt’s diary and letters.

When first browsing the inventory one is struck by the range of material. In the first few pages we encounter works on geography and travel in James Bruce’s *Cartes et Figures du Voyage en Nubie et en Abyssinie* (1792), rhetoric in Quintilian’s *Institutionis Oratoriae* (1831), music in *Chansons Complètes* (1836) by Paul Debraux, a number of philosophical volumes by Johann Friedrich Herbart, botany in Candolle’s *Introduction à l’Étude de la Botanique* (1835), earth sciences in Leopoldo Pilla’s *Osservazioni Geognostiche che Possonsi fare Lungo la Strada da Napoli a Vienna* (1834), Gustav Schübler’s *Grundsätze der Meteorologie* (1831), *Minutes in Agriculture and Planting* by W. Amos (1810), Edward Griffith’s *General and Particular Descriptions of the Vertebrated Animals* (1821), classical literature by Virgil, Homer, Cicero and Livy, along with contemporary works by Goethe, Schiller and Jean Paul Richter. There is even an old French zoological atlas by L.F.

---

Table 5. Number of Titles by Subject Area by Language

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>French</th>
<th>German</th>
<th>Latin/Greek</th>
<th>English</th>
<th>Italian</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy &amp; Metaphysics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 (3%)</td>
</tr>
<tr>
<td>Philosophy</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Metaphysics</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Theology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Bible</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 (3%)</td>
</tr>
<tr>
<td>Education</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Law</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Languages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9 (10%)</td>
</tr>
<tr>
<td>Italian</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>French</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>German</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Dutch-Greek</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Natural Sciences &amp; Maths</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>34 (38%)</td>
</tr>
<tr>
<td>Botanical Sciences</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry etc.</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Earth Sciences</td>
<td>9</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>General Science</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Zoological Sciences</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Applied Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 (3%)</td>
</tr>
<tr>
<td>Agriculture</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Human Physiology</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Medicine</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>The Arts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 (6%)</td>
</tr>
<tr>
<td>General Arts</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Music</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Literature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20 (23%)</td>
</tr>
<tr>
<td>Roman</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Greek</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>German</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Italian</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Geography &amp; History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12 (13%)</td>
</tr>
<tr>
<td>Geography</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Geography &amp; Travel</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>History</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>26</td>
<td>15</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>90</td>
</tr>
<tr>
<td>Percentage</td>
<td>40</td>
<td>29</td>
<td>16</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Sources for these data are Appendix F, Parts 1 & 2. Titles used for this subject analysis are indicated by an asterisk preceding each record in the appendix.
Jauffret called *Zoographie des Diverses Régions, tant de l’Ancien que du Nouveau Continent* (1799). This last work is particularly intriguing because the only reference to Australia is a map showing the top third of the continent and depicts the ground covered by Leichhardt on his first expedition between Moreton Bay and Port Essington. Was it this very atlas in Leichhardt’s library that inspired the naturalist to lead an expedition across the north of Australia? (Figure 10.)

Figure 10. Map of northern Australia in Leichhardt’s copy of *Zoographie des Diverses Régions, tant de l’Ancien que du Nouveau Continent* by L.F. Jauffret (1799).

Surprisingly, only 41% of the titles analysed are classified as sciences, with the remainder falling into the humanities. A percentage breakdown of the publications by broad subject area in descending order is as follows: Natural sciences and mathematics (38%), literature—more than half of it classical (23%), geography and history (13%), languages (dictionaries & grammars etc., 10%), the arts (6%), applied sciences (3%), social sciences (3%), philosophy and metaphysics (3%), and theology (1%). Less surprising, given Leichhardt’s well-documented interest in geology, are the 14 titles (16%) relating to earth sciences. This is by far the largest single grouping of works by subject and suggests a degree of integrity in
the information contained in the inventory. On the other hand, the lack of botanical
texts identified (6%) is curious given Leichhardt’s frequently expressed interest in
Australian plants and his application for the position of Superintendent of the
Sydney Botanic Garden in 1842.

Leichhardt’s failure to secure the Botanic Garden position has been blamed in part
on the xenophobic views of the Macleay family,\(^61\) and the ‘foreignness’ of
Leichhardt is no better illustrated than by the variety of languages that appear in
his library. A breakdown of the titles by language reveals that works in French
were most represented (40%), followed by German (29%), Latin and Greek (16%),
English (7%), Italian (7%), and unidentified (1%). The higher presence of French
texts over German may be accounted for by Leichhardt’s lengthy period of study in
France prior to his move to Australia, and his reliance on the libraries of William
Nicholson and Robert Lynd may also explain the small number of titles in English.

One of the greatest challenges in trying to make sense of a subject analysis is to
consider what is missing from the library. As Leichhardt’s diaries and letters refer
to numerous published works and his interests and movements are well-
documented, the broad subject areas that appear to be under-represented are
botany, medicine, theology, and works with Australian content. I have discussed
previously the evidence that Leichhardt was relying on Robert Lynd’s botany titles
to undertake his own work, but the absence of medical works is surprising.
Leichhardt was exposed to a broad medical training in Germany, England and
France and applied his medical skills on a number of occasions in Australia. In light
of this, one might have expected some medical reference works in his library.
However, like the botanical works, these book ‘absences’ could be attributed to
Leichhardt’s small income. William Nicholson funded Leichhardt’s medical training
at Berlin in 1836 and freely shared his textbooks with his fellow student.\(^62\)

University Press, 1986, p. 68.

an expedition across Australia are now mingled with the dust of those they had no hope of saving.

The only theology represented on the inventory is a Lutheran family bible published in 1832—and was perhaps a gift from Leichhardt’s family around the time of his commencement at university. W.B. Clarke, in his 1854 report on the library, notes that there are theological works in the trunks, but there is now no evidence of these other than the bible.  

Perhaps most extraordinary is the lack of material relating to Australia in the library. Leichhardt planned to start a new life in Australia with William Nicholson, ambitious for them to become ‘interpretes Naturae’. Yet there are only four Australia-related titles in the group of 90 examined—they are all in French and all, except one, published prior to 1800. Of these titles, one recounts Cook’s voyage on the Endeavour (1774), one is a translation of Watkin Tench’s *Narrative of an Expedition to Botany Bay* (1789), another is a world atlas (1799) and the remaining title is the third edition of the Muséum d’Histoire Naturelle’s *Instruction pour les Voyageurs et pour les Employés dans les Colonies* (1829). While this last work contains useful desiderata of Australian zoological and botanical species, these books cannot have been the only sources of information about Australia in Leichhardt’s personal possession. It is possible he relied heavily on up-to-date English works owned by Nicholson, or perhaps his Australia-related titles were removed while the library was in storage at the museum.

The publication dates of the titles analysed in Table 5 reveal a predominantly recent collection of texts, where 64% of the titles were less than twenty years old when Leichhardt arrived in Australia. Of the remaining titles, only 10% were published prior to 1800. In keeping with this ‘modern’ library are the relatively few titles in Latin or Greek (16%), of which almost all are classical literature.

---

63 One wonders whether Clarke souvenired some of his friend’s religious works in 1854. If so, any evidence was lost when Clarke’s library was destroyed in the Garden Palace fire of 1882.


65 12 of the 90 titles in Table 5 were undated and are not included in this sample.
Leichhardt was not a zoologist relying on older works to classify animal specimens, instead he carried newer books relating to the earth sciences and up-to-date general scientific texts.

**How Leichhardt Used His Library**

As already noted, the predominance of French titles over other languages suggests that the library brought to Australia by Leichhardt reflected recent study and activity in France. Similarly, the subject matter of some of the works appears closely related to Leichhardt’s European field trip taken not long before his departure for Australia. Between September 1840 and April 1841, Leichhardt and Nicholson spent time in central France and Italy exploring extinct and live volcanoes, and visiting places such as Genoa, Naples, Rome and Venice along the way. Leichhardt also travelled to Switzerland towards the end of his journey and Leichhardt’s letters and journal of this time refer to some of the books listed on the inventory.66

Overall, nineteen titles listed on the inventory in sections two and three and Appendix F, Part 2 were probably used by Leichhardt during this trip and constitute 25% of all the titles located. A list of these books is included in Appendix F, Part 3. General texts on French botany and geography, along with scientific and geographic works specifically relating to the Auvergne would have been of particular assistance to Leichhardt during his tour of France in the autumn of 1840. Prior to the tour, Leichhardt had written to Nicholson, who was visiting family in England at the time, and asked him to bring back to Paris texts they would need in the field:

> I simply don’t know how we are going to get hold of the 1st part of Lyell’s Geology. Oh William, if only you could buy the book, and Hoffmanns map of Sicily too! The book we must have, or we shall always be at a loss. I’ve been through Lecoq’s book, and in part through Bouillet’s on the Cantal, so I know what preparation will do for us.67

---

66 Leichhardt, L. Tagebücher, 27 September, 1832—16 May, 1841. ML C151.
Interestingly, Lyell’s Geology is not listed on the inventory. Other titles, however, were—an Italian language primer, an Italian/German dictionary, a book on Genoa, books on geology in Naples and plants in Rome were all tools for Leichhardt’s journey through Italy in late 1840 and early 1841.

**The Significance of the Library’s Content**

The breadth of subject material covered in this collection of books is impressive, as is the range of languages represented. Leichhardt’s hunger for knowledge is clear from his dedication to study both formally and informally and this library suggests the extent of his knowledge. His approach to education was nonconformist and he articulated the way in which he viewed his intellectual self-development in a letter to his father in 1836:

> The more mental sustenance we can accumulate, the more calmly we can await the future, though my long delay over my studies, or the slackening of progress as I widen my interests, embarrasses me whenever I am asked 'What are you studying? What do you intend to be? What exams are you sitting for? Got your degree already?' Away with all that! I’m setting my course myself, and shall be my own examiner. The bigger the building the longer it takes to build.⁶⁸

Leichhardt’s view of his self-education indicates how significant a personal library must have been to him. In a sense, the books were the bricks with which he was ‘building his building’. While we know from Leichhardt’s diary and letters that he read and made note of many more titles than appeared in his library, the volumes listed on the inventory were of enough significance to warrant his carrying them halfway around the world.

There are indications, however, that the collection of books Leichhardt brought to Australia may, in some respects, have been past its use-by date. In 1841, on the eve of his departure for Australia, Leichhardt marks a new stage in his life:

> My preparatory studies must now be considered as finished. I have followed Herbart’s philosophical scheme with deep inward resolve to become an all-round

naturalist. I have heard abundant argument against it and am now convinced that I should devote myself to one thing. What that one thing is to be will depend on the circumstances in which I find myself and on the final purpose.\textsuperscript{69}

While the texts that he had used on his recent European field trip may have helped remind him of his observations, there was little material that specifically related to the country he wished to explore and a considerable proportion of the books he brought with him were classical texts from school. If Leichhardt had assumed his European texts would help him with his Australian scientific research, it was not long before he realised a direct comparison between field results in Australia and those of Europe was not always helpful and that a fresh perspective was required.\textsuperscript{70} Nevertheless, the library provided Leichhardt with a core collection of books that could assist him with questions of botany, geology, chemistry, mineralogy and meteorology in his newly adopted country. He was conscious, however, of the obstacle to accessing the latest scientific thinking during his long periods of isolation in the bush. In a letter to Gaetano Durando in Paris, Leichhardt complains of not having the opportunity to keep up with new scientific literature, but vows ‘the time will however come, when I shall sit down quietly to my books and make up the gap of 6–8 years’.\textsuperscript{71} The library Leichhardt brought to Australia represents his life in Europe: the texts of his school years, his tertiary training, philosophical influences, and his most recent field research on the Continent. Perhaps though, it is the few books containing Australian content in the collection that hint at Leichhardt’s first interest in the southern antipodes.

The 1881 inventory of Leichhardt’s personal possessions has provided the key to exploring the content of his library. By transcribing this abbreviated document,

\textsuperscript{69} Roderick (1991), p. 38.

\textsuperscript{70} Peter Krüger observes: ‘Leichhardt first demanded and justified the necessity of theoretically, independent Australian geological research, not confused by European ideas’, Peter Krüger, ‘Ludwig Leichhardt: A German Geologist of the “Vormärz” period, in Australia: Studies on the History of Discovery and Exploration, [Frankfurt/Main]: Im Selbstverlag des Institutes für Wirtschafts- und Sozialgeographie der Johann Wolfgang Goethe-Universität Frankfurt/Main, 1994, p. 137.

\textsuperscript{71} Ludwig Leichhardt to Gaetano Durando, Sydney, 24 October 1847, Aurousseau (1968), vol. 3, p. 968.
identifying the majority of titles listed and applying a variety of library search strategies, almost all the books accessioned by the AML and PLNSW have been identified and 74 of Leichhardt’s volumes located. It has also been confirmed that 45 volumes, approximately one third of the library, were given to the German Consul-General in 1902 and transferred to Germany. While there was never any doubt that Leichhardt was well-educated, the subject analysis of the library confirms the depth and breadth of his interests and the physical reality of the volumes provide us with clues about the life of a travelling natural historian.

This library contains the works of Alexander von Humboldt and Johann Friedrich Herbart—sources which clearly influenced and supported Leichhardt’s resolve to become an ‘all-round naturalist’. However, the content represents more than science and includes numerous works of literature, music and history in a number of different languages.

The books listed in the inventory appear to represent the ‘old world’ or ‘Herbartian’ period of Leichhardt’s life—casting light on his broad education and European field study. While they tell us less about his ‘new world’ experience in Australia, the lack of more up-to-date scientific material emphasises his concentration on research out in the field while his library stayed in Sydney. This suggests that his desire to explore was the ‘one thing’ he had chosen to pursue in opposition to the multifaceted approach of Herbart that he appears to have rejected in 1841. There is no doubt, however, that Leichhardt’s work in the field continued to rely heavily on the training that had been inspired by his admiration for Herbart.

The rediscovery of the Ludwig Leichhardt library has provided us with an opportunity to examine many of the works treasured by the explorer up until his disappearance and offers access to what was arguably a symbol for Leichhardt of his education, self-sufficiency and intellectual independence.
William Swainson’s Library

In May 1851, British-born naturalist, author and zoological illustrator, William Swainson (Figure 11), ventured from his home in New Zealand to Australia in the hope of improving his impecunious position. During his three-year stay he was to make contact with the individuals responsible for later purchasing part of his personal library on behalf of the Australian Museum in 1858. The purchase of this collection marked the first major financial investment in books by the Australian Museum and yet no record of these titles has survived. While a few of Swainson’s books are obvious by their binding and his prominent annotations and have been recognised by the AMRL and its researchers, most of his collection remains unknown. In this section I will identify as many as possible of the Swainson books that were delivered to the Museum in January 1858, physically reunite the collection and examine it as a whole. This process also provides us with the opportunity to exploit Swainson’s tendency to annotate his books and enables us to consider the evidence of his reading and, in particular, his intellectual relationship with William Sharp Macleay in the 1820s and ‘30s.

The Troubled Life and Career of William Swainson

Born in 1789 in London, William John Swainson was the son of John Timothy Swainson (1756–1824), a customs collector and keen amateur zoologist who had been a founding member of the Linnean Society of London.72 William’s education was cut short when at the age of 14 he became a junior clerk in the Customs Secretary’s office. Fascinated by his father’s collection of British insects and shells from a young age, Swainson swore to pursue his passion for zoology in the tropics.73 In 1807, William’s father arranged a position for him with the Commissary-General of the Mediterranean Army and he departed for Sicily to

participate in the Napoleonic Wars at the age of 17. His work responsibilities were relatively light and he found time to sketch, paint, collect zoological and botanical specimens and acquire books. He returned to England in 1815 before following his original passion in 1816 and ventured to the tropics of Brazil. In 1819 Swainson returned home, this time with a vast collection of specimens and was elected to the Royal Society in 1820, with Alexander Macleay as one of his proposers.74

---

An accomplished artist, Swainson was encouraged by Dr William Leach, of the British Museum, to experiment with the art of lithography, which had only recently been introduced to England. Swainson self-published his *Zoological Illustrations* in two series between 1820 and 1833, and the lithographic plates were much admired by his contemporaries.\(^{75}\) Credited with being one of the first British artists to employ lithography in bird illustration,\(^ {76}\) his work foreshadowed a trend that was to be avidly employed by many of the greatest zoological illustrators of the nineteenth century, and he has been described by David M. Knight as ‘a conservative innovator who succeeded in making zoological illustrations into a branch of fine art in Britain’.\(^ {77}\)

Disappointed by a small inheritance on the death of his father in 1824, having failed in an application to be keeper at the British Museum and needing to support his wife, Swainson could no longer play the role of gentleman scholar and scientist. It was not an easy decision for him to make:

> Bred up with somewhat aristocratic notions, and accustomed when on service to *command* rather than to *obey*, I had a rooted dislike to all commercial affairs and would rather have gone once more on active duty than have sat behind a desk. At length it occurred to me that no profession was more honourable than that of an author ... and that I might justly turn to pecuniary account that knowledge to gain which I had sacrificed so much.\(^ {78}\)

Up until 1840, Swainson was to produce a stream of volumes, many in Dionysus Lardner’s *The Cabinet Cyclopaedia*, and all of which devoutly followed and

\(^{75}\) ‘It will be sufficient if we mention that the coloured figures of birds then were, and still are, almost unrivalled. They are certainly not surpassed by the highly-lauded plates of Audubon—of which hereafter—but are perhaps equalled by those of Gould. The figures are beyond conception lovely and delicate, and it only remains for us to remark, that every philosophic Ornithologist must possess the Zoological Illustrations, if indeed they are now to be had’. Neville Wood, *The Ornithologist’s Text-Book: Being Reviews of Ornithological Works: With an Appendix Containing Discussions on Various Topics of Interest*, London: J.W. Parker, 1836, p. 33.


expanded on the principles of Macleay’s Quinary system and were most fully articulated in Swainson’s *Preliminary Discourse on the Study of Natural History* (1834). At the time of its writing, Swainson revelled in being ‘surrounded with immense collections and with a large library, [where] I had all the materials of study under my own roof’.

One might have thought that Swainson’s many natural history titles appearing in *The Cabinet Cyclopaedia* and *The Naturalist’s Library*, mass-produced by new technology and distributed as far away as Australia, would have helped spread the Quinarian word. By the mid 1830s, however, Swainson had come under serious criticism for his ideas and Macleay himself wrote in 1840 that Swainson’s interpretations ‘often become far-fetched and even ludicrous’.

With the death of his first wife in 1835, and his inability to support his family despite a prolific publishing output, Swainson decided to emigrate to New Zealand. Needing to raise funds, he sold some of his drawings to Cambridge University and a portion of his zoological library was auctioned off in Fleet Street in May 1840. Swainson’s specimens and books were sent to New Zealand on three ships, one of which struck an uncharted rock in Table Bay, South Africa. Swainson’s daughter, Mary, wrote of the loss of ‘Papa’s beautiful books’, though a number were salvaged—some of which are still in the South African Museum, while others made it to New Zealand in a water-damaged state.

---

80 ibid., p. 348.
81 Trove searches reveal numerous advertisements for both titles in Australian newspapers between the 1830s and 1850s.
82 Fletcher (1920), p. 598.
Settling in Lower Hutt Valley, north-east of Wellington, Swainson continued to struggle financially and in 1848 lost half his house to fire. While a valuable cabinet of butterflies acquired by his father from the Duchess of Portland was destroyed, there is no mention of damage to his books. The remaining years of Swainson’s life were less than happy as he was beset by financial problems, was separated from his family for three years while in Australia, and suffered both the destruction by earthquake of his property at Hawkeshead and the death of his beloved daughter, Mary Marshall, only months before his own death in 1855.

**Voyage to Australia**

An author of more than a dozen monographs and numerous scientific papers and celebrated for his pictorial representations of the world’s zoology, Swainson might have expected a respectful and warm welcome from Sydney’s small scientific community. The response appears to have been mixed, however, and in reporting back to his son not long after his arrival Swainson expresses his ambivalence:

> The people, although very hospitable to me, are what we call “very colonial in manner”, and in everything else. My old acquaintances have died off, or so changed for the worse, that I no longer recognise them as the same. But there are many others who love Natural History, and all these have vied with each other in their attentions to me, so that I go from one house to another.

After initially residing with solicitor Randolph Want, who was an ‘enthusiastic conchologist’, member of the Australian Philosophical Society and later Australian Museum Trustee, Swainson then visited the home of A.W. Scott on Ash Island, another future trustee who lived near Newcastle. Taking the opportunity to sketch both native and introduced plant species in the Scott garden, Swainson was highly complimentary about the hundreds of drawings made by Scott’s daughters, Harriet

---

85 ibid., p. 55.


87 Randolph Want was serving on the Board of the Australian Museum at the time of the purchase of Swainson’s library.
and Helena, for a publication by their father on the lepidopterous insects of New South Wales. Excited by the richness of the local insect life and the quality of the Scott sisters’ work, Swainson quickly wrote an enthusiastic review of the yet unpublished book in *The Sydney Morning Herald*, which was subsequently read to a meeting of the Linnean Society of London accompanying a display of the women’s illustrations.⁸⁸

Swainson had come to Australia to convert property he owned into cash to pay off debts and help support his large family, but he had been momentarily seduced by the fauna around him: ‘The insects of this Colony are numerous and very beautiful, so that if I remain here until Spring I shall really begin once more to collect’.⁹⁹ Later complaining about the unhealthy weather and the rising cost of living due to the discovery of gold in Australia, Swainson changed his tune and within a year had little good to say, particularly about the local scientific community:

> As for the Science, among the few who pretend to any in Sydney, there is nothing but envy, hatred and “all uncharitable men”. These people are quite mad at me, because I have made discoveries without end, of things they have all passed over and now they will not give me the least local information. In short, dear Mary, I am most heartily tired of living here.⁹⁰

Correspondence from W.B. Clarke to W.S. Macleay, only a month after Swainson had penned his typically egocentric complaint, illustrates the local eagerness there was to discover new species as well as the deference displayed towards Sydney’s most senior gentleman scientist, W.S. Macleay:

---

⁸⁸ The Hon. Mr. Hope, on the part of Mr. Scott and at the request of the President, exhibited numerous drawings prepared for an intended work on “Australian Lepidoptera and their Transformations, drawn from the Life by Harriet and Helena Scott, with Descriptions, General and Systematic, by A.W. Scott, M.A.” Of this work an account had been given by W. Swainson, Esq., F.L.S., in the “Sydney Morning Herald” for the 30th of August last [1851]; from which the Secretary read extracts, showing the great novelty and interest attaching to many of the subjects, more especially with reference to the transformations of the several species figured.’ A.W. Scott, ‘Notice of an Intended Work on Australian Lepidoptera and Their Transformations, and of the Drawings Prepared for it’, *Proceedings of the Linnean Society of London*, vol. 2, 1852, p. 172.


⁹⁰ Swainson to Mary Marshall, Wollongong, 2 October 1852, ibid, p. 165.
I was interested at the time about what I believe to be a new form of Cephalopod. That very philosophical person Mr Swainson and that very observant cleric my friend C.P.N. Wilton MA. were ‘nature-looking’ under the cliff at Nobbys [Newcastle] when one of them observed floating on a pool of sea water left by the tide a small round white ball like a boy’s marble. It was picked up & transferred to the Parsonage there neither knowing what it was. On reaching Newcastle it was exhibited to me & without pretending to any very accurate knowledge of it I pronounced it to be the internal shell of Cephalopod. I want your judgment of it from such a description as I can give you ... I fear my description is not very worthy of the Zool. Soc. Sydney but you will pardon it after all, I dare say.91

No doubt Swainson expected a similar level of respect from the local naturalists. He was, after all, a fellow of both the Linnean and Royal Societies, the latter for which he had been nominated by Sir Joseph Banks no less, and had numerous species named after him.

Disappointed by the results of his property dealings yet still confident of his scientific classificatory abilities, Swainson offered his services as a botanical draftsman to the administrators of New South Wales and Victoria. He suggested that a study of Australian native trees would provide significant economic advantage and relieve the confusion where ‘up to this moment the “Gum Trees” remain a chaos’,92 and for good measure threw in the name of William Sharp Macleay who as ‘the first authority, perhaps on such questions in existence’ understood this problem best.93 Victorian Lieutenant-Governor, Sir Charles La Trobe, took Swainson up on his offer and the naturalist sailed for Melbourne in January 1852. Lack of funding delayed the commencement of Swainson’s study and was a constant bugbear in his relationship with the Victorian Government, and the government’s failure to provide scientific instruction meant Swainson was left on his own to devise the scope of his research. In October 1853, Swainson delivered his report to Baron von Mueller, government botanist, announcing that he had

92 Swainson to the Colonial Secretary of Victoria, Wollongong, 30 July 1852, Swainson and Swainson (1992), p. 164.
93 ibid.
identified an estimated 500 botanically distinct species of gum tree.\textsuperscript{94} Attached to his list of species was a note in which he explained that the absence of any books to refer to prevented him assigning appropriate names to some of the plants and they had been left unnamed.\textsuperscript{95} It is doubtful, however, that his library back in New Zealand would have made any difference to the final outcome. Clearly Swainson was a better zoologist than botanist and Sir William Hooker, Director of the Royal Botanic Gardens, Kew, and a man suspicious of all-round naturalists,\textsuperscript{96} was highly disparaging of the report in a letter from England to Baron von Mueller in April 1854:

If I were pleased with your report, I cannot say that I gave to our Secretary for the Colonies an equally flattering account of Mr. Swainson on the Gum Trees!!! In my life I think I have never read such a series of trash and nonsense. There is a man who left this country with the character of a first-rate naturalist (though with many eccentricities), and he goes to Australia and takes up the subject of Botany of which he is as ignorant as a goose.\textsuperscript{97}

Keen to get back to his family in New Zealand but still worried about his lack of funds, Swainson accepted an offer of four months' work from Sir William Denison, Lieutenant-Governor of Tasmania, and arrived in Launceston in late 1853. Despite constantly complaining to his family of the Tasmanian cold and his advancing years, Swainson spoke glowingly of the local scientific community and laid particular praise on botanist Ronald Gunn and Sir William Denison, who quickly introduced him to fellow members of the Royal Society of Van Diemen’s Land. At last Swainson felt valued:

I was received “with distinction” by Sir W. Denison with whom I dined, and accompanied to the meeting of the Royal Society a day or two ago. Several of the

\textsuperscript{94} The seven page report was subsequently published by the Parliament as \textit{Botanical Report of William Swainson}, Melbourne: J. Ferres, Government Government Printer, 1853.


\textsuperscript{96} ibid., p. 60.

elite have called upon me and nothing, in short, can be more different than my reception here than at Melbourne.  

At the Royal Society Meeting, with Denison in the President’s chair, Swainson took the opportunity of sharing his extensive experience and knowledge of conchology by discussing an ‘Orange Cowry of Tahiti’ (*Cypraea aurantium*) which had been exhibited at the meeting:

Mr. Swainson took occasion to observe, that at the beginning of the present century this was considered as the most valuable shell in the cabinets of Europe. It was first taken to England by Capt. Cook, who gave a fine specimen to Sir Ashton Lever, at the sale of whose Museum it fetched £21, being purchased by the late Alexander M’Leay, Esq., Colonial Secretary under the Government of General Darling.

Swainson’s memory of the details of the Lever Museum sale of 1806 may well have been refreshed by his recent proximity to the Macleay family, or the exorbitant price paid by Macleay was perhaps a particularly celebrated event for those in the shell world. Whatever the trigger, Swainson’s breadth of experience was on show to the local scientific community. During his stay in Tasmania he attempted to put the shells in the Society’s museum into order, the collection of which was ‘in total confusion’, and then explained his arrangement at a society meeting; he prepared a paper on the cultivation of English grasses in Australia; sketched the ‘beautifully picturesque’ countryside and investigated the local timber trees, plants and marine life. Departing Australia for Wellington in June 1854, William Swainson’s journey had been peripatetic, often lonely, financially difficult and at times professionally humiliating. On occasions, however, he had enjoyed seeing the Australian flora and fauna in its native environment and meeting like-minded naturalists.

---

102 Swainson to Mary Marshall, Port Phillip, 28 December 1853, ibid., p. 179.
Swainson’s death in December 1855 marked the end of a zoological career that had started to fade in the late 1830s, while he had still been living in England. Despite many of his publications being held in libraries in both Sydney and Hobart around the time of his visit,\textsuperscript{103} it was Swainson’s scientific failure that was reflected upon by some. In late 1853, Dr William Stimson, a naturalist aboard the USS \textit{Vincennes}, flagship of the North Pacific Expedition, recounted in his diary a story told to him by Sydney taxidermist, James Wilcox:

That gentleman gave me some curious accounts of some naturalists whom I had long known by reputation, but did not dream of finding in \textit{propria persona} in this part of the world. He informed me that Macleay, the originator of the ‘circular theory’ of classification in natural history, was now residing at this place, and that Swainson, who carried out that theory so fully in zoology . . . was now wandering in these parts, poor and neglected, though still hopelessly moping over zoological subjects, though old and past active and useful labor in the field of science. As I listened to Wilcox’s account the conceit entered my mind that these two men were banished, as it were, from the scientific world of the Atlantic shores, for the great crime of burdening zoology with the false though much labored theory which has thrown so much confusion into the subject of its classification and philosophical study.\textsuperscript{104}

This tough assessment of the scientific contribution of these two men was not far off the mark, though one that had been far easier to make more than thirty years after W.S. Macleay’s \textit{Horae Entomologicae} had been published. In the two decades following this publication, there was much discussion, debate and adoption by some of Macleay’s circular system. The Zoological Club of the Linnean Society spent considerable time in the 1820s discussing the system and its members published extensively on it. Charles Darwin made careful study of Macleay’s \textit{Horae} and though he eventually dismissed it, his earlier notes suggest serious engagement with some of the arguments put forward.\textsuperscript{105} Yet Stimson’s harshest

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{103} The Australian Subscription Library Catalogue (1843) lists 10 Swainson titles from Lardner’s Cabinet Cyclopaedia series, and The Royal Society of Tasmania Library Catalogue (1856) lists six Swainson titles including his Report on Botany for the Victorian Government.
\end{itemize}
\end{footnotesize}
words are for Swainson, whose zealous following of Macleay's system in his many publications was seen as problematic by his contemporaries as early as the 1820s and his work was still being criticised for being dogmatic and unreliable as late as 1845.\textsuperscript{106} Sydney naturalists, such as Wilcox, were clearly aware of this criticism.

\textit{The Purchase of Swainson's Library}

At the beginning of August 1857, Sir William Denison, now Governor of New South Wales and AM trustee, informed the Board of an offer by Mrs Ann Swainson, William's widow, to sell the naturalist's scientific library.\textsuperscript{107} Denison had sounded out W.S. Macleay prior to the meeting and received a positive response from the Board chairman with regard to the offer:

\begin{quote}
I agree entirely with your Excellency as to the advantages that would accrue to our Museum from the possession of Swainson's library, and also as the 10/6 per volume being a very moderate price for the books provided they are in anything like a fair condition. To us indexed this library, as one of reference, will be of more use than to a private individual—for our chief business is with nomenclature and these old works contain the original descriptions of species to which the original names must always be attached.\textsuperscript{108}
\end{quote}

Ignoring the directions of her husband's will and selling off his possessions,\textsuperscript{109} Mrs Swainson appeared keen to fulfil the request from the Museum to send the 227 volumes for evaluation.\textsuperscript{110} When he had first examined the catalogue of books on

\begin{flushright}
\textsuperscript{107} AMS1, Trustee Minutes, 1 August 1857.
\textsuperscript{108} W.S. Macleay to Sir William Denison, Elizabeth Bay, 21 July 1857, AMS7, F12.50.
\textsuperscript{109} Swainson left everything to his widow for life, after which all possessions were to be converted into cash and this distributed equally among his children. Phil Parkinson (1984), p. 57.
\textsuperscript{110} 'His Excellency the Governor General undertook to write to Mrs Swainson respecting the library of scientific works belonging to her late husband, with the understanding that if she sends them up to Sydney, and they are considered worth the price the Trustees can afford to pay for them, she may expect to dispose of them.' AMS1, Trustee Minutes, 8 August 1857. There are differing reports as to whether the Museum purchased 227 or 228 volumes. Correspondence prior to the delivery of the books states 228 volumes, but the Museum's annual report for 1859 states that 227 volumes were purchased. For the purpose of this study I have assumed the latter figure was revised and correct.
\end{flushright}
offer, W.S. Macleay had stressed to Denison that the Museum ‘should not be justified in proposing to purchase this library without a previous inspection of its condition’, and had noted that some of the titles were lacking volumes such as ‘Cuvier’s great work on fishes’.\footnote{W.S. Macleay to Sir William Denison, Elizabeth Bay, 21 July 1857, AMS7, F12.50. The Cuvier title referred to by Macleay I have identified at the AMRL as acc. no. 708, G. Cuvier, Histoire Naturelle des Poissons, Paris: Chez F.G. Levrault, 1828–1849. The set is indeed incomplete, holding only 14 of the original 44 volumes published.} It is possible that Denison relayed this concern about the condition of the books back to Ann Swainson, as she appears to have dropped the price from 10/6 to 8/- per volume in a revised offer sent with the books to Sydney.\footnote{Sir William Denison to George French Angas, Government House, 16 January 1858, AMS7, F12.50.}

There is little doubt that the Museum Board was keen to purchase the books, as George French Angas, Museum Secretary, was asked to obtain estimates from the Colonial Architect for ‘fitting bookcases round a portion of the Committee Room’ prior to the library’s arrival from New Zealand for assessment.\footnote{AMS1, Trustee Minutes, 2 January 1858.} The cargo was delivered to Government House in early January 1858 and then forwarded to Angas at the museum. Denison gave Angas a number of instructions: he was to inform Macleay that the books had arrived; the books were to be ‘carefully examined as to their state and condition’; and the Secretary, who was a fine artist, might offer his opinion and a valuation of 179 drawings of shells which had been included in the delivery.\footnote{Sir William Denison to George French Angas, Government House, 16 January 1858, AMS7, F12.50.} In early February, the books were laid before the trustees and it was moved by Captain Ward, seconded by W.S. Macleay, and carried that the government be asked to provide £97 for the purchase of Mrs Swainson’s books. At the same meeting it was agreed to accept a quote by John Hill Junior & Sons for the fitting of bookcases in the boardroom and that the specifications be forwarded to the government for funding.\footnote{AMS1, Trustee Minutes, 6 February 1858.} Government payments moved slowly
in New South Wales and the cheque for Swainson’s library was not sent to New Zealand until nine months later.\textsuperscript{116}

What originally sparked Denison’s involvement in the representation of Ann Swainson during the sale of the library is uncertain, though we have seen that Denison not only encouraged William to spend time in Tasmania under his employ earlier in the decade, but also had an ongoing relationship with the naturalist through their shared activity at the Royal Society of Tasmania. Denison described himself as ‘acting for Mrs Swainson in this matter’ during the period of the sale,\textsuperscript{117} and had similarly facilitated a donation of a periodical to the library of the Tasmanian Royal Society, in 1852, for the widow of his deceased private secretary, Captain Charles Stanley.\textsuperscript{118} In considering Denison’s scientific contribution to Tasmania, Michael Hoare notes that ‘to every scientific endeavour … Denison lent his unstinting support and, where he could, the “pecuniary” aid of his government’.\textsuperscript{119} This extended to the supply of scientific literature to the Tasmanian Royal Society library where donations were made both formerly through his position as Lieutenant-Governor, as well as personally, and are documented in local newspapers and in the Society’s 1856 library catalogue.\textsuperscript{120}

Denison’s reputation as a scientific force who drove local projects and supported the institutions of science was articulated by W.B. Clarke not long after Denison’s arrival in New South Wales in 1855: ‘I had recently a conversation with Sir W. Denison who is anxious to assist the progress of science here; and I hope ere long he will be instrumental in the establishment of a journal of science and progress in this Colony’.\textsuperscript{121} Although a New South Wales journal did not materialise under Denison, the AML benefited from the supply of scientific literature through his

\begin{flushleft}
\textsuperscript{116} AMS1, Trustee Minutes, 4 November and 2 December 1858.

\textsuperscript{117} Sir William Denison to George French Angas, Government House, 16 January 1858, AMS7, F12.50.


\textsuperscript{120} Royal Society of Tasmania Library (1856).

\textsuperscript{121} W.B. Clarke to Joseph Milligan, St Leonards NSW, 12 March 1855, Moyal (2003), pp. 425–6.
\end{flushleft}
official role as Governor and his support for such book purchases as the Swainson library.

The archives at the Australian Museum hold little information about the motivation for the purchase of William Swainson’s library. It appears to have been an opportunistic acquisition driven by William Denison with the support of W.S. Macleay, and made at a time when Denison’s vision and influence was transforming the institution. Despite the age of many of the works purchased, they continued to be of importance to the process of classification and Swainson himself casts light on the possible advantages of these books to the Australian Museum. In his chapter dedicated to ‘the formation and arrangement of collections’ in *Taxidermy*, Swainson explores the functions of, and differences between, public and private natural history collections.¹²²

In his discussion of national museums, Swainson states that ‘a zoological library should be attached ... that nature may be studied both by books and specimens’.¹²³ Access to both books and specimens was essential for effective zoological research and Anne Larsen, in her study of early nineteenth-century English zoologists, discusses the nexus between ‘actual’ and ‘virtual’ specimens at this time. While she focuses on the collecting of ‘actual’ specimens, one can see the importance, particularly to a colonial museum, of books standing in for specimens not available locally, where a whole animal group can be represented by a blend of sources comprising specimens in a cabinet and books in the library.¹²⁴ Many of these scientific works were costly and yet essential where ‘a single word will not unfrequently decide a contested point’.¹²⁵ Illustrations were often as important as the text in these virtual specimens—adding considerably to the library budget of the serious student of nature. Swainson articulated this problem in *Preliminary Discourse*:

¹²² Swainson (1840), pp. 71–98.
¹²³ ibid., p. 73.
¹²⁵ Swainson (1834), p. 359.
If we aim at great proficiency and superior accuracy, these splendid publications must be had, cost what they will; for few of them, comparatively, can be seen at the public libraries ... For these reasons, the possession of a library and a [private study collection], available at all hours and at all seasons, is indispensible to the philosophic zoologist, who has thus to expend a fortune to become a master in his science.\textsuperscript{126}

This places Macleay’s comment about the attractiveness of these ‘moderately priced’ (and copiously illustrated books) into a new context. It was an offer almost too good to be true—a cheap job lot of quality scientific works had been offered to the newly energised institution and, though old, was still essential for the classification of specimens. That it was the relatively famous William Swainson’s collection may have been an added incentive to those convincing treasury to open its purse strings for the first major purchase of the newly-founded library.

**Identification and Content of Swainson’s Library**

In 1983, Phil Parkinson, a librarian at the Alexander Turnbull Library in New Zealand, asked the Australian Museum Library to supply a list of the titles that had been purchased from Swainson’s widow. The Museum was unable to supply such a list and Parkinson was left empty-handed.\textsuperscript{127} No doubt this was a source of frustration as he had located and documented detailed information about the movement of Swainson’s specimens and book collections from the beginning of the nineteenth century up until the early 1980s.\textsuperscript{128} Aware of the Museum’s inability to identify the Swainson library in its collection, a major aim of my analysis of the Museum’s rare book collections accessioned prior to 1883 (discussed in detail in chapter six) was to locate any surviving Swainson volumes.

During the course of my research I have physically handled thousands of volumes in the collection at the AMRL and, as Table 6 shows, I have identified 69 titles

\textsuperscript{126} ibid., p. 60.


\textsuperscript{128} Parkinson (1984).
provenanced to Swainson consisting of 155 volumes (68% of the original 227 volumes purchased). A further eight titles (9 volumes) have been identified as highly likely to have belonged to Swainson, which means that up to 72% of the naturalist’s volumes have been found. Many of the books are signed by Swainson, have retained his stag-crested bookplate or binding (see Figure 12), display his distinctive handwriting, or had been previously bound with other volumes identified as having belonged to Swainson.

Table 6 also includes an analysis of the surviving titles by date of publication (whether published before or after 1819), the publication language, how many of Swainson’s titles were also held in the library of Alexander Macleay, and the number of works discussed by Swainson in two of his major publications: his previously mentioned Preliminary Discourse (1834) and Taxidermy: Bibliography and Biography (1840). A full listing of titles identified is included in Appendix G.

Figure 12. Signs of ownership: Swainson’s bookplate and his gold-impressed crest of a stag passant on the spine of one of his books.
Table 6. AML Swainson Books Located (out of 227 vols originally acquired)

<table>
<thead>
<tr>
<th></th>
<th>Definite</th>
<th></th>
<th>Probable</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Titles</td>
<td>Volumes</td>
<td>Titles</td>
<td>Volumes</td>
<td>Titles</td>
<td>Volumes</td>
</tr>
<tr>
<td>TOTAL</td>
<td>69</td>
<td>155</td>
<td>8</td>
<td>9</td>
<td>77</td>
<td>164</td>
</tr>
<tr>
<td>Publication Date</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1819*</td>
<td>58</td>
<td>120</td>
<td>8</td>
<td>9</td>
<td>66 (86%)</td>
<td>129 (79%)</td>
</tr>
<tr>
<td>&gt;1819</td>
<td>11</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>11 (14%)</td>
<td>35 (21%)</td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin</td>
<td>30</td>
<td>59</td>
<td>6</td>
<td>7</td>
<td>36 (47%)</td>
<td>66 (40%)</td>
</tr>
<tr>
<td>French</td>
<td>17</td>
<td>52</td>
<td>1</td>
<td>1</td>
<td>18 (23%)</td>
<td>53 (32%)</td>
</tr>
<tr>
<td>English</td>
<td>18</td>
<td>38</td>
<td>1</td>
<td>1</td>
<td>19 (25%)</td>
<td>39 (24%)</td>
</tr>
<tr>
<td>Italian</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3 (4%)</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>German</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1 (1%)</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>Swainson Citation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discourse (1834)</td>
<td>35</td>
<td>93</td>
<td>6</td>
<td>7</td>
<td>41 (53%)</td>
<td>100 (61%)</td>
</tr>
<tr>
<td>Taxidermy (1840)</td>
<td>45</td>
<td>92</td>
<td>7</td>
<td>8</td>
<td>52 (68%)</td>
<td>100 (61%)</td>
</tr>
<tr>
<td>Either title</td>
<td>49</td>
<td>111</td>
<td>7</td>
<td>8</td>
<td>56 (73%)</td>
<td>119 (73%)</td>
</tr>
<tr>
<td>Held in Alex. McLeay's Lib.</td>
<td>28</td>
<td>61</td>
<td>3</td>
<td>3</td>
<td>31 (40%)</td>
<td>64 (39%)</td>
</tr>
</tbody>
</table>

*I have chosen the publication date of W.S. Macleay's *Horae Entomologicae*, 1819, to indicate a possible division between 'old' and 'new' works as mentioned by Macleay when considering their scientific value (see footnote 132).

and incorporates publication details, provenance evidence and references to Swainson’s own assessment of these scientific works in *Preliminary Discourse* and *Taxidermy*. The Australian Museum appears to hold the most extensive single collection of Swainson’s surviving library. Only some of the seventeen volumes originally donated to the South African Museum in 1855, following the wreck of the *Rupert*, are extant,\(^{129}\) there are only a few volumes in the National Library of

\(^{129}\) Parkinson (1984), p. 54.
New Zealand,\textsuperscript{130} and very little remains of the 351 printed works placed in trust at the Colonial Museum, Wellington, by Ann Swainson in 1866.\textsuperscript{131}

Before even considering the specifics of titles held, subject areas represented or evidence of use, we are able to make some broad observations about the Swainson material as represented in Table 6. W.S. Macleay had observed, rather unclearly, that the value of the collection lay in its ‘old works’ and for the sake of convenience I have defined ‘old’ as works published before Macleay’s best-known work, \textit{Horae Entomologicae}, which began appearing in 1819.\textsuperscript{132} Of all the books in Swainson’s collection, 86\% had been published before 1819 and 47\% had been written in Latin. While most of Swainson’s Latin texts were published after 1750 (83\% of all the publications in Latin), only a quarter of these were published in the first decade of the 1800s and reflects the shift by scholars to vernacular languages during the previous century.\textsuperscript{133} Many of Swainson’s Latin volumes were also listed in Alexander Macleay’s library.\textsuperscript{134} Half of the 31 titles common to both Swainson and Macleay’s collections are in Latin and reflect well-known taxonomically useful texts by Linneaus, Fabricius, De Geer, Haworth, Roemer, and Merian amongst others. In all, 40\% of the Swainson titles are listed in the catalogue of Alexander Macleay’s library and include many zoological publications influential in the late eighteenth and early nineteenth centuries. In addition to the Latin texts are works by John Latham, C.J. Temminck, Moses Harris, J.G. Fuessley, Dru Drury, George Shaw, Caspar Stoll, James Sowerby and, unsurprisingly, William Sharp Macleay, to name but a few.

By 1858 this collection, as represented by the AM’s purchase, was exceedingly out of date and it would appear that Swainson was increasingly out of touch with the


\textsuperscript{131} ibid., p. 57 and p. 59.

\textsuperscript{132} As the latest publication date in the collection is 1840, the year in which Swainson moved to New Zealand, this means the ‘newest book’ in the collection was already 18 years old when the library was purchased in 1858 and it is possible that Macleay considered all the books ‘old’.


\textsuperscript{134} As listed in Blackman (1845).
newest literature once he had emigrated to New Zealand in 1840. If these volumes were the extent of Swainson’s scientific library at the peak of his career in the 1820s and ‘30s it too would have been an old-fashioned collection, but we know from Swainson’s discussion of the literature in *Preliminary Discourse* and *Taxidermy* that he was at least aware of many of the latest works and, even if not owning them himself, had access to some of them. We have the rare opportunity of seeing what Swainson thought of some of the texts in his own library because three-quarters of the publications identified at the AMRL he lists in *Preliminary Discourse* and *Taxidermy*, and these observations have been cited in Appendix G.

An analysis of the subject content of the Swainson titles (see Figure 13) confirms the naturalist’s interest in a number of specific scientific areas. While it is impossible to ascertain how much of Swainson’s original library is represented by this surviving collection, 59 publications (77% of all titles) fall under zoology, with the strong focus of his publishing work in entomology and ornithology well-represented. Of the subject areas identified, entomology (38%) leads, followed by ornithology (16%), General Zoology and Botany (each 9%), General Science (6%), and then Malacology, Ichthyology, Voyages and Travels (each 5%), followed by Miscellaneous Literature (3%), Mammals (3%) and Comparative Anatomy (1%). Given Swainson’s self-professed expertise in botany during his years in Australia, the lack of botanical works is somewhat surprising and the plant books that were found were highly specialised—such as antiquarian works relating to his botanising while serving in the army in the Mediterranean. Also absent was an extensive range of books that one would expect to support Swainson’s interest in conchology.

---

135 In *Preliminary Discourse* and *Taxidermy*, Swainson often describes the quality of the illustrations in the publications listed which suggests that he has seen the work. This assumption is supported by the occasional mention of rare texts ‘not in our library’ and subsequent descriptions obviously based on hearsay. See Swainson’s mention of Salviani’s *Aquatilium Animalium Historiae Liber Primus* (1554) in *Preliminary Discourse* (1834), p. 13. It would appear from Swainson’s later description of the work in *Taxidermy* (1840), p. 316, that he had gained access to a copy after 1834.
Unlike Leichhardt’s relatively intact collection of books, the assumed carve-up of Swainson’s library limits the value of placing much weight on the distribution of subject areas beyond broad observations. Regardless of this, the Australian Museum Trustees believed that they were purchasing Swainson’s library of scientific works and many of the books bought were the naturalist’s key taxonomic tools and often cited in the publications he wrote. The most obvious omission from the collection, however, is the limited representation of Swainson’s scientific periodicals, dictionaries and encyclopaedias—all tools typical of a well-stocked scientific library of this period.\textsuperscript{136} It is probable that some of this material was put up for auction by Swainson in May 1840, when ‘a portion of the zoological library of William Swainson’ was sold at the ‘Poets Gallery’, in Fleet Street. Swainson’s books were sold along with the stock of bookseller Henry Coxhead and the catalogue does not identify individual ownership.\textsuperscript{137} There are, however,

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure13.png}
\caption{Swainson’s library by subject.}
\end{figure}

\textsuperscript{136} The only periodicals located are the two titles (five volumes) published by the Zoological Society of London and \textit{The Zoological Journal} (four volumes).

\textsuperscript{137} Mr Hodgson (1840).
numerous lengthy runs of periodicals, such as the *Transactions of the Linnean Society*, some of which may well have belonged to Swainson.

**Acquisition and Use—Evidence from the Swainson Volumes**

While we are unsure about the completeness of this collection, there is immense value in the volumes identified because of the physical evidence relating to their acquisition and use, as well as the commentary Swainson made about many of these works in some of the publications he wrote. This section briefly identifies some patterns and sources of acquisition and discusses evidence of Swainson’s use through his working notes made in many of the volumes.

The physical volumes in Swainson’s library provide the opportunity to access information about the acquisition of this material that may not have otherwise been recorded. Swainson always claimed that his passion for natural history began at a young age:

> My father had a collection of British insects and shells, and these had given me not merely a taste, but a passion, for natural history even when a mere child; and every moment I could command was divided between drawing and collecting. It was in vain that my parents endeavoured to repress this ardour, and to make these tastes subordinate: their judicious restraints only increased the evil: sleeping or waking, my thoughts were constantly bent on how I could get abroad, and revel in the zoology of the tropics.\(^{138}\)

In light of this burning desire to investigate the natural world, it comes as no surprise that the two titles dated as his earliest acquisitions arrived in his collection when he was only sixteen years old. In 1806, Swainson rather floridly signed his name in most of his volumes of *Entomologicae Systematica* by Fabricus (1792–98) as well as his newly acquired copy of Merian’s *Metamorphosis Insectorum Surinamensium* (1705). Both works were of a level of sophistication that suggests a degree of seriousness on behalf of the boy receiving the books and possibly on the part of the giver. The works had also been published almost a century apart, foreshadowing Swainson’s engagement with contemporary

---

scientific works along with a strong interest in the early history of scientific illustration and publishing.

There is no clue as to how Swainson acquired these two works and this is the case for many of his books. In some, he has indicated if they were gifts from the author and these include works from ornithologists, L.P. Vieillot and J.C. Temminck, and entomologist, Francis Walker. In others, there is evidence that he received books as gifts from his father, as in Lister’s *Historiae Animalium Angliae* (1678), and from Barron Field, who gave him a volume of Freycinet’s *Voyage Autour du Monde* (1824) sometime after Field’s return from New South Wales in 1824.\(^{139}\) Given the age of many of the books in Swainson’s library it is inevitable that they had been purchased second-hand, and the names of former owners have often survived. Many are unfamiliar but some names indicate the small circle of individuals recycling scarce scientific works over the decades. Swainson’s precious copy of *Metamorphosis Insectorum Surinamensium* had been previously owned by Dru Drury (1725–1804), a wealthy silversmith with a keen passion for entomology who, along with Alexander Macleay, had funded John William Lewin’s insect-collecting trip to Australia in 1798 and Lewin’s subsequent creation of the first Australian intaglio prints, in 1801.\(^{140}\) It is certain that Swainson paid attention to the provenance of his books and valued interesting associations. In his copy of Boccone’s *Museo Piante Rare, della Sicilia, Malta, Corsica, Italia, Piemonte, e Germania* (1697), under the signature of Charles du Bois, on the front pastedown, Swainson makes note of the books earliest owner:

> Charles du Bois was a well-known lover of natural history in the days of old Petiver who thus mentions him in one of his small tracts (Musei Peteveriani centa. prima. 1695) - “Mr Charles Dubois, a very curious observer, and my highly esteemed friend informs me” about the sexes of what Petiver calls the Lousie


On the opposite page, Swainson also notes that he had purchased the book at an auction following the death of his friend, entomologist and botanist, Adrian Haworth, whose publication, *Lepidoptera Britannica* (1803), also lies among Swainson’s volumes. Another source of second-hand book material was library duplicates and it appears that Swainson had purchased his copy of Schröter’s *Einleitung in die Conchylienkenntniss nach Linné* (1782–6) from a duplicate sale held on behalf of the British Museum in February 1831, with the standard BM library stamp accompanied by a dated ‘duplicate’ stamp (Figure 14).

**Figure 14. British Library stamps in Schröter’s *Einleitung in die Conchylienkenntniss nach Linné*.**

However, not all of Swainson’s books were acquired second-hand and a small number of the AMRL volumes were likely to have been new when he added them to his collection. The three books previously mentioned as presentations from authors were relatively recent publications and, like the few titles acquired after Swainson’s return to England from Brazil in 1819, were likely to have been new. Perhaps unexpectedly, some of these newer texts such as the later entomological works of Fabricius, were purchased in Genoa in 1814 in an effort by the young

---


naturalist to improve his library. In fact, the numerous works acquired by Swainson in the Mediterranean as a young man make up a significant proportion of his library at the AMRL, and this perhaps echoes Ludwig Leichhardt’s decision to haul half way round the world the sizeable collection of textbooks from his youth.

William Swainson arrived in Sicily aged 17, in 1807, and was to spend the next eight years serving in the Mediterranean Army, during which time he visited Malta, Greece and Italy. Keeping a diary over these years—more the scribbles of a young man on the Grand Tour than a soldier—there is evidence of his desire to pursue his interests in natural history, although there are only a few tantalising mentions of books during this period. The best evidence for Swainson’s book activity in the Mediterranean lies in the AMRL collection, with almost 25% of the titles provenanced to Swainson having been purchased in Sicily and Italy between 1809 and 1815. He makes it clear that from the time of his landing in Sicily he ‘enjoyed much leisure’ and ‘for several years … alternately investigated the zoology and botany of that charming island’. During his stay at Palermo, Swainson met Baron Bivona, ‘the most learned botanist of Sicily’ and also spent time with the polymath Rafinesque Schmaltz, exploring the fish of the western coast. Swainson received a number of local botanical specimens from Bivona, which significantly augmented his Flora Sicula and this activity was well supported by his acquiring early publications on Sicilian and mainland botany. Some of these rare works included: Allionio’s Flora Pedemontana (1785); Ucria’s Hortus Regius Panhormitanus (1789) (curiously inscribed ‘William Swainson from the author’ despite Ucria’s death in 1796); and probably Cupani’s Hortus Catholicus (1696–7). Swainson’s interest in this region did not stop when he departed the Mediterranean as he later purchased at auction, in 1834, a copy of Boccone’s Museo Piante Rare, della Sicilia, Malta, Corsica, Italia, Piemonte, e Germania (1697). On the front free endpaper of this book, Swainson notes: ‘Purchased at the sale of my late regretted friend Mr


145 ibid., p. 342.
Swainson’s book purchases in Italy were not limited to botany. In 1809 he obtained a copy of Leanti’s *Lo Stato Presente della Sicilia* (1761), while three years later he picked up copies of Mongitore’s *Della Sicilia Ricercata* (1742) and one volume out of four of Cetti’s *Uccelli di Sardegna* (1776), the latter of which he notes in *Taxidermy*: ‘of this rare work we have only seen one volume’.147 Neither was he limited to local subject matter, as he acquired a couple of entomological works in Genoa by Fabricius to supplement volumes he had collected prior to his departure from England.148 Just before his return to England, Swainson found a scarce copy of Rondelet’s *Libri de Piscibus Marinis* (1554) of which he described in *Preliminary Discourse*: ‘this early specimen of ichthyology has great and even extraordinary merit in the excellency of the wood-cuts copiously introduced in its pages: they are bold and accurate, and in general so characteristic, that nearly all the species may be at once identified’.149 Examples of more modern texts added to his library at the time were Jurine’s *Nouvelle Méthode de Classer les Hymenoptères et les Diptères* (1807), the plates of which he described as ‘of great beauty and executed with uncommon fidelity’,150 and Latreille’s *Histoire Naturelle des Fourmis* (1802) and *Genera Crustaceorum et Insectorum* (1806–9). The non-zoological nature of most of the books obtained by Swainson in the Mediterranean accounts for the relatively few mentions of these early additions to his library in his publications.

**Evidence of Reading**

The tidy hand of William Swainson, in pencil and ink, is a constant companion to those visiting the volumes from his library. It often appears as an ongoing

---

146 Boccone (1697).
147 Swainson (1840), p. 151.
148 A number of Swainson’s volumes of *Entomologicae Systematica* are inscribed ‘W. Swainson 1806’. See Appendix G, accession no. 76.
149 Swainson (1834), p. 13. This title was deaccessioned by the AML when it received a duplicate copy and was transferred, in 1916, to the Queensland Museum Library. Accession No. 142, AML Library Register.
conversation with not only the author of the text he is reading, but also his fellow scientists as well. The choice of medium with which he leaves a mark is suggestive of a variety of functions: the neat square notes in ink are to be revisited—the Arabic numeral beneath its Roman counterpart in a publication date, an index to genera on the blank endpapers, pointers to paragraphs of interest, brief summaries of fact, or egotistical marks against the mention of his name. His pencil notes are freer: streams of consciousness and signs of work where he dashes down the revised version of a printed species name, or simply the freedom to be impolite and leave outraged comments against ideas with which he does not agree—after all, pencil can always be erased. Examples of most of these various forms of communication are illustrated in Figure 15.

Engaging with W.S. Macleay’s ‘Horae Entomologicae’

At the AMRL there is only one copy of the work by W.S. Macleay that had such a strong influence on Swainson’s professional life. This copy of *Horae Entomologicae* (1819–21) was once the property of Thomas Horsfield, curator of the Museum of the East India Company and another of Macleay’s acolytes, but was purchased after the Swainson library acquisition. Until William John Macleay, cousin of W.S. Macleay and museum trustee, submitted a letter to the Museum Board in 1863 about the book, there was no indication that Swainson’s copy had been included in the Museum’s original purchase.151 William John asked whether the Board would agree to an exchange of books, for he would rather like to have Swainson’s copy of his cousin’s scarce *Horae Entomologicae* and used the existence of the duplicate Horsfield copy as a justification. The exchange was approved and Macleay’s volume was later donated to the University of Sydney.152

151  AMS1, Trustee Minutes, 7 May 1863.

*Swainson signed most of his books from at least the age of 16, but probably considerably younger, given the appearance of a particularly juvenile signature on some of the volumes. Here, he claims ownership of a volume sold not long after the death of its previous owner, Dru Drury, in 1804.*


*Arabic translation of Roman numerals: many of Swainson’s books include this conversion—most likely for ease of use.*


*Swainson would mark mentions of his name in printed texts: ‘W.S. mentd.’*

Passages of interest were frequently commented upon by Swainson. In this example Swainson disagrees with John Latham’s description of the Oriole and refers to his own manuscript observations made while in Brazil.

![Image of text]


Swainson would frequently mark genera of interest in ink for later reference. He was also keen to note uncredited discoveries he believed he had made.

*Genera Indexes*: Many of Swainson’s volumes contain indexes on the front or back endpapers for ready access to the species mentioned within.
Renowned for his prickly personality and failed friendships, William Swainson marks his disapproval of passages in John Fleming’s *Philosophy of Zoology* with ‘nonsense’ and ‘what absurdity’ pencilled in the margins. While making no comment about the worth of this work in *Taxidermy* (1840), Swainson notes ‘numerous errors will be found’ in Fleming’s History of British Animals (1828), though ‘there are some good and original observations scattered through it’ (*Taxidermy*, p. 189).

As if thinking aloud, rather than noting a fact for later reference, Swainson writes in pencil that Thomas Horsfield ‘follows [W.S.] McLeay’.
On the title page of Swainson’s volume at the University of Sydney, the AML’s earliest library stamp has been violently scratched out, a crude cancellation perhaps by Gerard Krefft who was then managing the library, or a later deletion by someone uncomfortable with the potential for confusion over ownership. Regardless, it is the markings of William Swainson that are of most interest in a book whose spine has crumbled with age, perhaps because of the heavy use of its first owner. There are numerous markings by Swainson in *Horae* and many, one assumes, were made during his earlier readings. A study of Swainson’s reactions to, or one could almost say ‘conversation’ with, Macleay are too extensive for this study. However, a sample of these notes and subsequent reiterations of similar sentiments by Swainson in his own publications hint at the potential for further examination.

In a section examining the history of the anatomical study of mammals, Macleay momentarily touches on the physical similarities between man and primates and Swainson is shocked by what we later discover is a rhetorical device on Macleay’s part:

> The *Mammalia*, however, could not long be examined without the anatomist having his ideas of the corporeal perfection of man, and all the fabric of vanity which was built on such ideas sorely injured, by perceiving that while some mammiferous animals excelled him in particular points of organization, others, such as the *Quadrumanes*, approached him so nearly as to render it a problem of some little difficulty to draw the line of distinction between them. [pp. 268–9.]

Both men held strong religious beliefs and Macleay later revisits the issue and argues why man should in fact be separated from the rest of the animal kingdom in his system. Yet Swainson feels he should add a note to strengthen the argument:
We see however that it may be doubted even by those who have best the means judging; and indeed as the indubitable superiority of man over other creatures depends on something totally immaterial, which throws him out of the group of animals and makes him an insulated being, namely, his mind, I can see no necessity for metaphysicians or naturalists so strongly insisting on what they cannot prove,—the decided superiority in detail in the human mechanism over that of all other animals. Taken as a whole, the human frame without doubt is a most complicated machine, yet perhaps it scarcely possesses any one sense or bodily power in which it is not excelled by some irrational being. [p. 339.]

‘True, but not such a combination of perfections.’

Earlier in his work, Macleay argues that despite the physical similarities between man and the orangutan, it is the human ability to reason that is the key separator. Yet because of this ability, it is the duty of man to look beyond his own form ‘to gain a general acquaintance with the works of our creator’ and consequently the ‘vilest insect that crawls is as deserving of notice as the elephant’.153 Similarly, Swainson visits this territory in his chapter ‘Reflections on Nature and Art’ in *Preliminary Discourse*, where he argues a direct link to the work of the Creator by studying natural history. The naturalist is not hampered in the quest for God by an intermediary as in the creation of a ‘beautiful painting’ or ‘intricate piece of mechanism’.154

No doubt a study of Swainson’s responses in the margins of this work might reveal more about how he received Macleay’s theoretical discussions and absorbed them into his own work. Ultimately, though, against a background of theoretical failure,
this object—as marked up by its previous owner—points to the strong link between Swainson and Macleay and the unique place this book collection has in the history of the Australian Museum.

We know this volume would have been on the list of works perused by William Sharp Macleay when the library was first offered to the Museum in 1857. Upon its arrival in Sydney, one can’t help wonder whether Macleay was intrigued enough by the volume’s existence to take the time to leaf through and explore the margins. After all, it was a book once owned by his most vocal and troublesome supporter, had been the source of their theoretical bond and, in the end, had contributed to the downfall of their scientific reputations.

The Significance of the Swainson Library

The numerous articles and book chapters discussing the zoology and art of William Swainson, written over recent years, are a curious legacy for one who was deemed by his contemporaries as unlikable and a scientific failure. It is not that opinion of the man has changed much, but there is recognition of his role in the history of zoological illustration in nineteenth-century Britain. Similarly, his descriptions of scientific texts considered important at the time, his biographies of contemporary naturalists and descriptions of scientific life in the metropolis are also useful.

The collection of Swainson’s books at the Australian Museum represent the largest number of surviving volumes from his library, but is only part of what was a more extensive collection. While generalisations should be avoided about an incomplete collection, these volumes not only complement what we know about Swainson, but provide new information about his earlier years in the Mediterranean and in England and the way he used his books. This early collection of scientific works, predominantly produced on rag paper with woodblock or hand-engraved illustrated plates, represents the age of science preceding the steam-powered publications through which Swainson tried to spread his quinarian beliefs in the 1830s. These are the actual copies of the titles he cites in his publications, three-quarters of which he describes in his *Preliminary Discourse on the Study of Natural History and Taxidermy: Bibliography and Biography*. When these copies with their
accompanying marginalia are matched against the comments Swainson makes about these works in his publications, we can see the way in which his commentary has been formed such as with his observations on *Philosophy of Zoology* by scientist and theologian John Fleming.

Unlike Ludwig Leichhardt, Swainson’s formal education was brief but, like Leichhardt, his practical naturalist field experience was extensive and his books contain handwritten notes reflecting observations made in the field as far away as Brazil. The advantage Swainson had over someone like Leichhardt was his access to the naturalist network in the metropolis through the activities and position of his father. His library reflects the interests of an early nineteenth-century English gentleman of science, who, like W.S. Macleay and later, Ludwig Leichhardt, were deeply influenced by scientific activity in France. Swainson’s teenage interest in natural history is evident in the early acquisition dates of a number of the books purchased by the AML. There are also a number of titles acquired just prior to Swainson’s move to Sicily, in 1807, and these are supplemented by a further dozen titles collected by Swainson while on tour in the Mediterranean. Many of these works reflected Swainson’s early study of entomology and this subject area represents well over a third of the naturalist’s titles held by the museum.

The volumes sold to the AML by Ann Swainson were not the dross of the naturalist’s library but rather the survivors of an auction sale, shipwreck, fire and earthquake. The collection included key classificatory texts, books of Swainson’s youth and, most importantly, the volume of W.S. Macleay’s *Horae Entomologicae* with some of the earliest evidence of Swainson’s interaction with the Quinary theory. Throughout the volumes, some dating up to his departure for New Zealand, there is evidence of Swainson developing his thinking as he examines the research of others and considers these findings in the light of his own work. There are few works, however, published after the 1820s in this collection and this absence seems to mirror the proportionally few titles from the 1830s included in Swainson’s ‘Bibliography of Zoology’ in *Taxidermy*.\(^{155}\) Swainson continued to

---

\(^{155}\) Swainson (1840), pp. 98–386.
discuss classification from a quinary perspective in this, one of his last works, and praised the quinary-based publications from the 1820s of W.S. Macleay, Horsfield and Vigors. Far less talented in his scientific theorising than W.S. Macleay and undone by his rigidity and dogmatism, Swainson nonetheless left a mark in early nineteenth-century science, particularly through his art, and the remains of his library at the AMRL has proved a significant archive of the published influences on Swainson and his interactions with them.

The Libraries of Two Early Australasian Naturalists

These two case studies have identified a significant number of books belonging to two well-known naturalists who both had ties with the Australian Museum or the people who worked there. While these collections tell us much more about how they were used by their owners in Europe prior to their arrival in Australia, they reveal new information about the way both men used their literature and even how they approached their scientific work. The libraries quite clearly suggest the different stages of life and aspirations of the two men in the 1840s: the younger, more mobile Leichhardt had a relatively new portable collection whereas Swainson’s volumes were predominantly older. Coincidentally, both our subjects arrived in Australasia at the beginning of the 1840s and neither of their collections at the AM contains any books published after 1840. How many books they purchased after this date we do not know but each of them were likely to have been limited by financial constraints.

On a more practical level for researchers, both the State Library of New South Wales and the Australian Museum Research Library have used the information contained in this thesis to add provenance details to their holdings of Leichhardt books in their library catalogues and relocated volumes once stored in general access collections to their rare book sections. For the first time, bibliographical information about the surviving books of Ludwig Leichhardt can be collated at the press of a button and provide ready access to those who would like to research the books physically. The AMRL plans to follow this procedure when the list of William Swainson books is also made available.

Gerard Krefft is a significant figure in the history of nineteenth century Australian science (Figure 16). He is celebrated not only for his zoological work but as a man who was prepared to challenge individuals on points of scientific fact regardless of their position in Sydney society or metropolitan science. He is also remembered as one who could be abrasive and incautious in delicate political situations and a man whose career and life ultimately ended in tragedy. The dramatic end of Krefft’s career in 1874—where he was stripped of his position as Australian Museum curator, physically removed from the Museum and his character assassinated—often overshadows his early career and his development as a scientist. It was also Krefft who had the opportunity, as the curator employed at the time of the first major purchases for the Australian Museum Library, to benefit from access to literature not available to previous museum employees. In this study of the book resources acquired and used by those associated with the Australian Museum, we have an opportunity to consider what qualifications, experience and attitudes Krefft brought to the Museum upon his appointment in 1860, and how his development within this institutional environment casts light on the education and work practices of those participating in science in Australia at the time.

This chapter traces the development of Gerard Krefft’s career at the Australian Museum through his contact with, and response to, available scientific literature. Arriving without higher education but with good field experience, he not only developed his practical skills but was later influenced by the theoretical work of Charles Darwin and Darwin’s followers such as T.H. Huxley and Ernst Haeckel. For the sake of this study I will call Krefft a proto-professional—one who was employed in science without university qualifications but with extensive practical training—and will look at his transition from self-educated collector, in the 1850s, to a government employee confident enough to publish widely and to challenge both senior naturalists in the colony and the ‘experts’ in the metropolis. Krefft’s major achievements in Australian science are commonly recognised to be his
discovery and classification of the ‘living fossil’, the Queensland Lungfish, *Neoceratodus forsteri*, his publications on Australian reptiles, his preparedness to challenge Richard Owen over his description of the ‘marsupial lion’, *Thylacoleo carnifex*, and his articulation and promotion of evolutionary theory in the Australian press. Yet he was not limited to these areas alone. Krefft wrote broadly about a range of subjects, often spurred on by local economic concerns; so in addition to his better-known research, I will examine such an example in my study of Krefft’s use of the AML in his research and writing on parasites in 1871.

Recognition of Krefft’s contribution to the understanding of evolution in Australia came only a few years after his death when, in 1888, Professor Baldwin Spencer, evolutionary biologist and foundation chair of biology at the University of Melbourne, acknowledged Krefft’s role in a lecture at Ormond College.¹ In his address, ‘Australian Animals: Their Past and Present History’, Spencer carefully described the relationship between Australia’s fossils and living animals with reference to the work of Darwin. It is within this pro-evolutionary context that we see Spencer not only discuss at length the significance of the Queensland Lungfish, Krefft’s most celebrated discovery, but also his placing of Krefft alongside T.H. Huxley and W.H. Flower in a discussion of their disagreement with Richard Owen over the interpretation of the fossil remains of the *Thylacoleo carnifex*.

By examining a sample of Krefft’s publications in the 1860s and early 1870s, I will consider what role access to scientific literature played in Krefft’s research and his subsequent ability to communicate scientific ideas to his audiences, including the possible contribution of a library such as the AML to the development and expertise of a nineteenth-century museum curator in the colonies.

¹ The lecture was delivered to the Ormond College Literary and Debating Society, 9 August 1888. Baldwin Spencer, ‘Australian Animals: Their Past and Present History’, *The Argus*, 8 September 1888, p. 6.
The Use of Books by Museum Scientific Staff, 1850–1874.

In previous chapters we have seen the difficulty in accessing scientific literature by staff at the Museum and those naturalists less financially secure than the Macleays and their friends. Gerard Krefft commenced his employment at the AM in 1860, by which time he was fortunate enough to benefit from Denison’s recent library activism and the flow of volumes purchased with the 1858 book endowment. Not only had many titles previously unavailable in Sydney been purchased but Krefft, as curator and museum secretary, was in a position to ask the Board to acquire additional works when he needed them. This process did not always guarantee that Krefft got what he requested and he complained on numerous occasions throughout his tenure of not having the books he required. This raises the question of whether these were simply the complaints of a public servant whingeing about a lack of resources or whether this limitation actually restricted Krefft’s ability to
contribute to a better understanding of Australian fauna and to engage with recent theoretical developments. If Krefft was more reliant on his British masters with their large libraries and extensive collections of Australian type specimens than he would have liked, was he constrained in challenging the ideas of those in the metropolis? If this is the case, one might ask whether Krefft’s preparedness to challenge Richard Owen in the 1870s was a result of not only greater confidence through ready access to newly discovered specimens, stronger professional experience and relationships, but also an improved access to literature from the AML and other local sources. Before exploring further Krefft’s education and evidence of his access to publications, this section will briefly describe the purpose of scientific texts used in museum work by those such as Krefft in the third quarter of the nineteenth century.

Just as George Bennett had prepared the Museum’s inaugural catalogue in 1837, W.S. Wall, G.F. Angas, S.R. Pittard and Gerard Krefft were expected to classify and catalogue the Museum’s collections. These staff had the skills to match newly acquired specimens with similar examples, to make identifications using published catalogues, journal articles and monographs, but were not required to classify new species. Much of George Bennett’s catalogue relied on material directly taken from the Transactions of the Linnean Society of London, both Wall and Angas were given examples of British Museum catalogues to follow in 1858, and Gerard Krefft’s Catalogue of Mammalia in the Collection of the Australian Museum, published in 1864, includes many entries directly copied from John Edward Gray’s List of the Specimens of Mammalia in the Collection of the British Museum (1843).

Whereas Bennett had relied on a publication from a gentleman’s society of which a number of the Australian Museum Committee were members, later museum staff followed the lead of the newly reformed British Museum, which set the standard on natural history classification for much of the nineteenth century. J.E. Gray, keeper of the Zoological Department, had claimed this ground as early as 1836 when appearing before the Select Committee on the Affairs of the British Museum, where he argued that the Museum could provide an authoritative standard through its extensive collection and serve as a model to all other British
institutions.² Like the Linnean Society publications, the British Museum catalogues—which first began arriving at the museum in 1858—had an air of familiarity about them as the likes of George Bennett, W.S. Macleay and John Gould were acknowledged for their specimen donations.³ The young naturalist Krefft had been encouraged by Gray when he visited London in 1858, and in the early 1860s Krefft deferred to the expertise of the British Museum by sending his unidentified Australian species to Britain for classification, at a time when Australian government naturalists were still reliant on the metropolis to undertake their work.

One of the most frequent complaints from naturalists around the world in the nineteenth century was that they did not have sufficient books to interpret the flora and fauna around them. In Australia, grumbles were heard from the likes of Krefft in Sydney, Ronald Gunn in Tasmania and the Microscopical Society of Victoria. Louis Agassiz, in the United States, articulated a strategy that the Australian Museum was not ready to adopt in the early 1860s:

> In this country there is a growing interest in the study of Nature; but while there exist hundreds of elementary works illustrating the native animals of Europe, there are few such books here to satisfy the demand for information respecting the animals of our land and water. We are thus forced to turn more and more to our own investigations and less to authority; and the true method of obtaining independent knowledge is this very method of Cuvier’s, — comparison.⁴

Whether museum staff were trying to match specimens with previously known examples or brave enough to attempt to systematically arrange unknown species accurately, they required scientific literature. They needed classification tables, the historical context of the naming of species, descriptions of the distinctive features of species, anatomical studies and illustrations. In addition to subject specific monographs and catalogues, staff required access to the latest thinking available in

---

periodicals. It was possible to identify new journal articles through published indexes and these were first acquired by the AML in the early 1860s. Scientific works of an introductory and instructive nature were also purchased in relatively large numbers and suggest that museum staff, like Krefft, may have been actively training while doing their job of classifying, arranging the collections for display, and preparing publications for scientific journals and the Sydney popular press.

The Early Naturalist Education of Gerard Krefft

Born in 1830 in Brunswick, Germany, Johann Ludwig Gerard Krefft was the son of a confectioner. There is some disagreement over the level of education Krefft attained in Germany, with one source reporting that Krefft claimed to have studied biology and palaeontology at Berlin University for several years. This claim was not repeated elsewhere by Krefft and it seems that he worked from the age of 15 as a merchant's clerk in Halberstadt, before migrating to America in 1850 to avoid the military draft. Fond of drawing and wishing to undertake further art studies, he spent time examining *Birds of America* by John James Audubon in the New York Mercantile Library. He sold copies he had made of the Audubon plates to pay for a fare to Australia and arrived in Hobson's Bay, Victoria in November 1852. Krefft travelled the Victorian goldfields trying his luck as a miner and, having had some success, returned to Melbourne by late 1856.

---


7 Nancarrow (2009), p. 146.


9 ibid.

10 ibid. Whitley states that Krefft spent five years on the goldfields, returning to Melbourne in 1857. However, Krefft must have arrived back earlier during which time he studied Gould’s plates in the Public Library before heading to western Victoria with William Blandowski in December 1856.
Picking up where he had left off in New York, Krefft continued to educate himself by studying the best artistic representations available of local fauna:

applying myself in studying at the Public Library ... I copied many of Gould’s sketches of Australian animals. These coming under the notice of the curator of the Melbourne Museum I was engaged by that gentleman to accompany him on an expedition to the Lower Murray and Darling.\textsuperscript{11}

Having caught William Blandowski’s eye, the young artist and naturalist was employed as a collector on the expedition that was to investigate the natural history of the Murray River region and collect specimens for the National Museum. However, it was apparently Krefft’s artistic skill that had been noticed and his letter of engagement directed him to focus on making drawings rather than collecting.\textsuperscript{12} Between December 1856 and November 1857, Krefft not only made hundreds of drawings of the countryside, the local Aborigines and the fauna of the Murray and Lower Darling, he also compiled catalogues of the specimens that were collected and wrote the best surviving account of the expedition.\textsuperscript{13} Upon his return to Melbourne, Krefft approached Professor Frederick McCoy (1817–99)* of the National Museum for work and was employed to put the expedition’s collection into order.\textsuperscript{14} Shortly after, he was forced to curtail his engagement upon news of the death of his father and he returned to Europe.

This premature end to Krefft’s museum career in Victoria may have been of some disappointment to him at the time, but his return to Germany via England enabled him to engage with the metropolitan scientific network, where he used his experience on the Blandowski expedition as an entrée. Interest in Australian flora and fauna was still strong in Europe and in July 1858 Krefft excitedly wrote to McCoy from London: ‘I have arrived here and have made the acquaintance of a

\textsuperscript{11} Krefft, Disposition, 1874[?], p. 1.
\textsuperscript{13} ibid., p. 12. Krefft’s incomplete journal was never published and is now located at the Mitchell Library, Gerard Krefft Papers, A267 and A268, along with a number of Krefft’s sketches made on the expedition, Gerard Krefft - album of watercolour drawings, ca. 1857-1858, 1861, 1866, PXD 9.
\textsuperscript{14} Gerard Krefft to Prof. Frederick McCoy, Melbourne, 28 January 1858, Museum Victoria Archives, Inwards Correspondence, MVS 12 (OS 02622).
great many gentlemen interested in the natural productions of Australia’.\textsuperscript{15} He was invited by John Gray of the British Museum to attend a meeting of the Zoological Society, where he presented a brief paper on the Chestnut-crowned Babbler of Victoria.\textsuperscript{16} Only six months after having begged McCoy for employment as a ‘museum clerk, collector or draughtsman’, Krefft was now boasting of his classificatory skills, which he said had been praised by John Gould at the meeting and which he hoped McCoy would also recognise by offering him employment upon his return to Australia.\textsuperscript{17}

While in London, Krefft made contact with Gould, J.E. Gray, Albert Günther and Richard Owen as well as leading zoologists through the Zoological Society.\textsuperscript{18} While many of these names would figure frequently in Krefft’s correspondence once he had returned to Australia, it appears that it was John Gould who was most influential at this point in the young naturalist’s career. Krefft’s arrival from the National Museum in Melbourne opportunely coincided with Gould’s first delivery of what would amount to 5000 bird mounts ordered by McCoy for his museum.\textsuperscript{19} The importance of John Gould in Krefft’s early career has been underestimated and extends beyond Krefft’s copying of Gould’s plates in Melbourne in the mid 1850s. I would argue that interactions between the two men while in London, and subsequently by mail, gave Krefft increased confidence not only in his early scientific work but also his position within the scientific world.

The John Gould enterprise dominated the luxury natural history publishing scene in Great Britain for almost fifty years. Between 1830 and 1888, 50 imperial volumes of more than 3,300 individual plates, mainly of birds, were produced with

\textsuperscript{15} Gerard Krefft to Prof. Frederick McCoy, London, 1 July 1858, Museum Victoria Archives, Inwards Correspondence, MVS 12 (OS 02622).


\textsuperscript{17} ibid.

\textsuperscript{18} Nancarrow (2009), p. 146.

accompanying letterpress under Gould’s name.\textsuperscript{20} An astute businessman, he mitigated against the financial risks of self-publishing by maintaining a healthy trade in natural history specimens from around the world and coupled this with a successful taxidermy business.\textsuperscript{21} The son of a royal gardener, Gould succeeded in developing a network of powerful friends such as Richard Owen, nurtured acquaintances in both the sciences and the aristocracy through subscription of his publications and wrote over 300 scientific papers.

In Australia, John Gould’s influence was magnified significantly. As we have already seen, his publications of \textit{Birds of Australia} (published 1840–48; supplement 1851–69) and \textit{Mammals of Australia} (1845–63) were considered the most comprehensive and definitive catalogues of Australian birds and mammals. Their cost was prohibitive for most, but subscribers included museums, public and parliamentary libraries, universities, Mechanics School of Arts and wealthy individuals.\textsuperscript{22} As only two hundred and fifty copies of each title were produced worldwide, access to copies was extremely limited in Australia. Yet the reputation of these works appears to have been well established locally by the 1860s. This success was the result of the strong network of contacts Gould developed and maintained after his field trip to Australia in the late 1830s, strong promotion of his works in the local press, and Gould’s relationship with the celebrated Australian explorers of the 1840s, ‘50s and ‘60s such as Edward Eyre, Ludwig Leichhardt, Charles Sturt, George Grey and John McDouall Stuart.\textsuperscript{23} Many of the

\begin{footnotesize}
\begin{enumerate}
\end{enumerate}
\end{footnotesize}
specimens collected on these journeys were sent to Gould for identification and then reported in the explorers’ highly popular published journals.\(^{24}\)

It is clear that Krefft had gone to London armed with copies of catalogues and drawings he had made while on the Blandowski expedition. Shortly after arriving, Krefft sent Gould a list of eggs he had found in various locations along the Murray.\(^{25}\) He also presented Gould with copies of drawings he had made of the pig-footed bandicoot and the dingo while on the expedition. Krefft reported to McCoy that Gould was ‘very much pleased’ with his sketches of the pig-footed bandicoot taken from life and had said he would include copies in a supplementary volume of his Australian mammals.\(^{26}\) Despite Krefft’s much better representation of the bandicoot, Gould did not publish a supplementary volume and Krefft’s only known sketches taken from life of this extinct species were later banished to obscurity in library stacks in Sydney and Kansas.\(^{27}\)

---

\(^{24}\) The following explorer journals include Gould’s identification of species or references to Gould’s Australian publications: Edward Eyre, *Journals of Expeditions of Discovery into Central Australia and Overland from Adelaide to King George’s Sound in the Years 1840–1*, London: T. & W. Boone, 1845; Ludwig Leichhardt, *Journal of an Overland Expedition in Australia, from Moreton Bay to Port Essington, a Distance of Upwards of 3000 Miles, During the Years 1844–1845*, London: T. & W. Boone, 1847; Charles Sturt, *Narrative of an Expedition into Central Australia … during the years 1844, 5, and 6*, London: T. and W. Boone, 1849; George Grey, *Journals of Two Expeditions of Discovery in North-West and Western Australia during the years 1837, 38, and 39*, London: T. & W. Boone, 1841; and John McDouall Stuart, *Explorations in Australia: The Journals of John McDouall Stuart During the Years 1858, 1859, 1860, 1861, and 1862*, London: Saunders, Otley, & Co., 1864.


\(^{26}\) Gerard Krefft to Prof. Frederick McCoy, London, 1 July 1858, Museum Victoria Archives, Inwards Correspondence, MVS 12 (OS 02622). Krefft was one of a number of naturalists whose presented sketches were adapted by Gould for his publications. While working through the rare book collections for this thesis I found an original watercolour of a leopard seal by G.F. Angas which had been bound into the back of J.E. Gray’s *Hand-list of Seal, Morses, Sea-Lions and Sea-Bears in the British Museum*, London: Printed by order of the Trustees of the British Museum, 1874. A copy of this watercolour had been mailed to Gould by George Bennett in 1857 and a similar animal appears in *Mammals of Australia*, vol. 3, pt. 12, pl. 50, with mention of Angas’ drawing in the letterpress.

\(^{27}\) Two of the drawings given to Gould are now located at the University of Kansas: Gerard Krefft, *Choeropus occidentalis*, watercolour, Gould Drawings, Nos. 727 and729, Kenneth Spencer Research Library, University of Kansas. Another copy of one of the pig-footed bandicoot sketches is held by the Mitchell Library, State Library of NSW, PXD 132f.63.
expedition, show that he was not afraid to publicly disagree with those in London.28

Krefft’s dingo watercolours,29 however, were passed on by Gould to one of his artists, H.C. Richter, as the basis for the two plates published in *Mammals of Australia* (Figure 17), and Krefft’s contribution was well acknowledged in the letterpress.30 This recognition was a source of pride to Krefft31 as one who had educated himself in Australian fauna through Gould’s publications and whose artistic and zoological observations had now been recognised by Gould himself. Despite this boost to his embryonic career, he held no illusions as to the balance of power in this relationship. Krefft needed letters of introduction from key players in Britain to take back to Australia if he wanted to obtain an appointment in a museum or gain a position on a sponsored expedition. Gould offered to provide Krefft with a general letter of introduction for people not personally known to Gould and a second letter addressed to George Bennett, in Sydney. Gould advised Krefft that

in Sydney I am better known and the enclosed letter to Dr Bennett who is the prime mover in matters of natural history there will answer your purpose better than any other persons in the country. You will find Dr Bennett a most excellent person.32

---

28 Krefft observed that ‘Gould’s figures of Choeropus occidentalis are spiritless, being taken from dry skins’ and ‘the eyes of this species, which is very large and brilliant, is represented much too small in Gould’s figures’. Gerard Krefft, ‘Vertebrata of the Lower Murray’, *Transactions of the Philosophical Society of NSW, 1862–65*, 1866, pp. 13–14.
29 Only Krefft’s sketch of the full size animal has survived at the University of Kansas: Gerard Krefft, *Canis dingo*, watercolour, Gould Drawings, No. 799, Kenneth Spencer Research Library, University of Kansas.
30 The opposite life-sized head of the dingo, or native Australian dog, is portrayed so faithfully, through the talents of Messrs. Richter and Krefft, that I am certain no one will regret me giving two plates of this animal’: John Gould, ‘Canis Dingo’, *The Mammals of Australia*, vol. 3, London: The Author, 1863.
32 John Gould to Gerard Krefft, Broad Street, Golden Square, 10 February 1859, Gerard Krefft Papers, ML A267.
Gould’s success relied on his ability to extract favours from those he assisted and Krefft was no exception. This relationship—still reliant on patronage—was one of many that Gould had nurtured with private individuals in Australia, as well as representatives of government institutions such as the museums in Sydney and Melbourne.

In return for this assistance, Krefft was asked to keep Gould in mind if he should embark on any private expeditions in the north of Australia. Gould could offer payment for specimens and arrange publication of any field observations in his own publications or the proceedings of the Zoological Society. It would have been clear to Gould that Krefft was not a gentleman naturalist but rather a collector with skills, talent and a little museum experience and who would need to earn a living. Krefft was a step up the hierarchy from other collectors employed by Gould as he had been offered the right to publish material under his own name—an honour not bestowed on full-time collectors, such as John Gilbert, who Gould had employed for his Australian collecting.

The immediate assignment given to Krefft by Gould at the beginning of 1859 had been to audit both the public and private libraries of Brunswick, Germany. Gould

Figure 17. Dingo illustration by Krefft and as published by John Gould.
wanted to know who held his publications and who he could approach for possible sales.\textsuperscript{34} Krefft was diligent in his research and informed Gould that none of his publications were held in Brunswick but believed they were sorely needed. He recommended the names of those in the aristocracy who might be interested but regretted that most of those who could afford the books were not of a scientific bent, while men of science were usually too poor to acquire them. Krefft continued his reconnaissance in Halberstadt and Berlin and concluded that Gould should send him some publication samples to help excite interest.\textsuperscript{35} Gould’s new supplier of field sketches, a potential specimen collector and field observer, was now offering to be a distributor for his publications. Perhaps it was an offer made out of politeness as Krefft was soon on a ship back to Australia, but he had been well primed to look out for Gould’s interests just like the man to whom he had been advised to deliver his letter of introduction, Dr George Bennett.

**Krefft’s appointment to the Australian Museum**

Krefft arrived in Sydney from Hamburg via the Cape and Adelaide on 6 May 1860.\textsuperscript{36} While in Adelaide, he had sent his reference from John Gould to the Exploration Committee, hoping to be part of the planned expedition to the Gulf of Carpentaria under the leadership of Burke and Wills.\textsuperscript{37} His plan to join the ill-fated expedition was superseded, however, by advice given to him by William Denison only days after his arrival in Sydney. The Governor had responded positively to Krefft’s presentation of the Gould testimonial and informed Krefft that the Museum was about to advertise the position of Secretary and Assistant Curator on a starting salary of £200 per annum. Denison advised Krefft to include the Gould testimonial

\textsuperscript{34} ibid.

\textsuperscript{35} Gerard Krefft to John Gould, Brunswick, 13 February 1859, M2897 John Gould Papers and Correspondence, Mitchell Library (AJCP).

\textsuperscript{36} *SMH*, 7 May 1860, p. 4. Krefft arrived in Adelaide aboard the ‘Peter Godeffroy’ on 8 April 1860 before departing Adelaide for Sydney on 28 April.

\textsuperscript{37} Nancarrow (2009), p. 147.
along with other references in his application and assured him of his support.\textsuperscript{38} An advertisement for the position appeared in the press five days later and asked for applicants who were experienced in ‘clerical work and [had] a knowledge of or taste for natural history’,\textsuperscript{39} reflecting the Board’s desire for someone who would be ‘copying the minutes and correspondence of the Board and arranging the specimens in the Museum’.\textsuperscript{40} Krefft came in ahead of twelve other applicants\textsuperscript{41} and while support from the Macleay family would have been essential for this appointment, John Gould’s introduction to George Bennett had clearly played a role.

Bennett had arrived in England in May 1859, only a matter of months after Gould had provided his letter of introduction to Krefft. There must have been some correspondence between Krefft and Bennett while they were both in Europe for Krefft was directing people to contact him care of ‘Dr Bennett in Sydney’ by April 1860.\textsuperscript{42} Whether Bennett had offered accommodation in his absence is unknown, but as he did not arrive back in Sydney until late in 1860 he was not in a position to personally support Krefft’s case at the time of his application.

Krefft was appointed Assistant Curator on 15 June 1860 and it is worth considering what skills and qualities he brought to the position. He did not have a university education, but had studied Gould’s \textit{Australian Birds} and \textit{Mammals} closely and had recently examined the scientific literature of a number of libraries in Brunswick. His key attributes appear to have been his Australian field experience and knowledge of Australian fauna, his brief period at the Melbourne Museum and his portfolio of illustrations of Australian animals—Gould’s published dingo plates based on Krefft’s sketches arriving at the Museum around the time of

\textsuperscript{38} Governor Denison to Gerard Krefft, Government House, Sydney, 11 May 1860, Gerard Krefft Papers, ML A262.

\textsuperscript{39} \textit{SMH}, 16 May 1860, p. 1.

\textsuperscript{40} AMS1, Trustee Minutes, 15 March 1860.

\textsuperscript{41} AMS1, Trustee Minutes, 15 June 1860. After his dismissal from the Museum, Krefft claimed that there had been ‘about 50 applicants’! See Krefft, Disposition, 1874[?], p. 1.

\textsuperscript{42} Nancarrow (2009), p. 147.
his appointment. Perhaps most important, were the testimonials from Frederick McCoy and John Gould as well as support from Governor Denison. McCoy stressed the ‘high intelligence’ and ‘zeal’ of Krefft as a naturalist, his skills as a zoological draftsman and the successful discharge of his museum duties. Gould advised Bennett in his letter of introduction that Krefft had made the acquaintance of ‘many other of our mutual scientific friends’ while in London and was well qualified as a scientific naturalist to take part in exploring expeditions.

Krefft had also arrived with a duplicate set of specimens from the Hamburg Museum, which he used to his advantage both when first introducing himself to the Governor and when making initial contact with Museum officials. He not only presented a collection of new European shell specimens to add to Denison’s much prized conchological collection, but also donated 118 specimens to the Museum during the time of the appointment process. Krefft had clearly learnt the art of sweetening his relationship with potential employers well, but it was a skill he appears to have forgotten towards the end of his career at the Museum.

At the time of his appointment, Krefft had only one publication to his name—the paper on the Chestnut-crowned Babbler that he had presented to the Zoological

---

43 The first 11 parts of the AM’s copy of Mammals of Australia arrived in Sydney aboard the Hollinside on 14 May 1860. While this publication was not formally presented to the trustees until the August board meeting, we know Krefft had communicated how happy he was with the dingo plates, published in part 11, by mid-July (see footnote 31).

44 ‘A Few Letters and Testimonials from Distinguished Men of Science, Addressed to Gerard Krefft, Curator and Secretary of the Australian Museum, from 1858 to 1874’, Gerard Krefft Papers, ML A261.

45 ibid.


47 A day after the assistant curator’s position was advertised in SMH, Denison wrote to Krefft confirming that he would be sending some duplicates to the Curator of the Hamburg Museum in exchange for Krefft’s gift. Governor Denison to Gerard Krefft, Government House, Sydney, 16 May 1860, Gerard Krefft Papers, ML A262.

48 Krefft donated to the Museum ‘a collection of eggs of European birds, fifty species; twelve species of European mammalia, in spirits; eleven species of European reptiles, in spirits; nine skins of European Mammalia; and thirty-six skins of European birds’. ‘Donations to the Australian Museum during May, 1860’, SMH, 22 June 1860, p. 5.
Society of London two years earlier. A simple field description of the bird, its habits and its habitat made by Krefft while on the Blandowski expedition, it is detailed and competently written in the excellent English Krefft displays in his correspondence of the time. Yet this is a paper in the vein of the colonial collector—one hoping to offer a new species to the gentlemen in the metropolis—who was not required to focus on the challenges of classification while isolated from the support of type specimens and a well-stocked library. Krefft was, however, prepared to take his research to the next stage and notes in his article that he had been disappointed to discover that what he had believed was an unknown species had been newly published in Gould’s supplement to *Birds of Australia*. The simplicity of this paper sets the scene for much of Krefft’s writing well into the 1860s. Initially, he had been employed to collect, exchange and arrange new specimens at the Museum and then, from 1861, as curator, to also communicate this work to the residents of the colony.

Like fellow communicators of Sydney science, such as George Bennett and W.B. Clarke, Krefft was forced to rely mostly on local newspapers to publish his research findings and observations on Australian fauna. His first articles were published in Sydney in the early 1860s, but as late as 1873 he observed that

> There is not at present a single periodical in this country which records general discoveries in natural history, and, therefore, it may be acceptable to have from time to time a summing-up in the pages of the *Sydney Mail*.

Krefft was also well aware of the difference between his newspaper readers and those consuming scientific periodicals and he articulated this in the pages of *The Sydney Morning Herald* in response to criticism of his writing:

---

49 See footnote 16.

As I do not write for a scientific public, but try to impart what information I can to my fellow colonists, it is beside the question to point out certain parts [of an animal] in papers like the present one.  

This detail, however, 'to point out certain parts' or to cite sources or provide reviews of previous literature is lacking in much of Krefft’s earlier published work, regardless of the format. While the use of citations in scientific writing of the time was far from standardised, I would suggest the simplicity of his early work reflects not only the simpler function of a museum identifying, listing and communicating its local fauna, but perhaps also the inexperience of one relying on limited education, limited published sources and one still developing skills to effectively make comparisons between specimens.

Having left school prior to his fifteenth birthday, there is no doubt that Gerard Krefft had much to learn at the Australian Museum. Like Ludwig Leichhardt, Krefft was an autodidact but he lacked Leichhardt’s many years of attending lectures in Berlin and Paris. As we have seen in the previous chapter, Leichhardt retained many of his school texts, carrying them from one side of the world to the other along with his more recent acquisitions. There is no record of the library Krefft brought with him to Australia, but we know that he too relied on at least one of his school scientific textbooks to compensate for texts not held in the AML. Despite Krefft’s lack of higher education, the rigours of the German school system at the time offered a solid grounding in many subjects. In a discussion paper on a proposed technological education system in Australia, Krefft provided considerable detail about his own education. A normal week consisted of 32 hours of lessons with the option of participating in an additional ten hours of school activity. Subjects consisted of two hours each of history, natural history, 

53 ‘[Rudolphi’s] work was not in our library, and I quote from one of my school-books, which gives a brief abstract of his system’. Gerard Krefft, ‘Worms in Sheep’, SMH, 26 May 1871, p. 5.
geography, mathematics, arithmetic, French, freehand drawing, mapping, architectural drawing and geometry. Four hours each of ‘writing’ and German were included as well as the option of two hours each of religious instruction, English and Spanish. Two half day field trips per week were offered to those students interested in botany, geology and surveying. Given Krefft’s skills in the field and his facility with English, it would appear he had made the most of the additional subjects available.

**Krefft’s publications between 1860 and 1869.**

Whatever the exact set of skills Krefft brought with him to the museum, the volume of work he produced in his first decade, both in terms of developing the Museum’s collections and his writing, was impressive. Gilbert Whitley lists 65 works published between 1860 until the end of 1868 in his bibliography of Krefft, and this does not include all of Krefft’s newspaper articles. While many of these entries include contributions of little more than a few paragraphs, larger works also appear. Supporting Krefft’s complaint about the lack of opportunity to publish locally is a limited list of journal and newspaper titles, though he was clearly able to disseminate information both in Australia and London. Most of Krefft’s earliest writing appeared in the London journals *Annals and Magazine of Natural History* and *Proceedings of the Zoological Society of London*, reflecting not only the prestige of publishing in the metropolis and the lack of opportunity in Sydney but also suggests Krefft’s use of contacts made during his visit to London. While the translation of a London-published paper by Krefft on the Queensland Lungfish appeared in the *Archiv für Naturgeschichte* in 1871, evidence of his work in German publications is mainly limited to reviews of his published work or extracts

---


56 The Australian publications listed by Whitley include: *The Sydney Morning Herald; The Illustrated Sydney News; Transactions and Proceedings of the Entomological Society of New South Wales;* and *Transactions of the Philosophical Society of New South Wales*. 
taken from British journals. It is clear, however, that Krefft himself was also
distributing his written material because articles published in the internationally
obscure Sydney Mail reappeared in both Austrian and British publications. As the
decade progressed, Krefft took advantage of new periodicals launched in the 1860s
by the Entomological and Philosophical Societies of New South Wales and his
articles appeared more frequently in local newspapers.

Given the New South Wales government’s slow confirmation of Krefft’s promotion
to the position of curator following Pittard’s death in 1861, it is not surprising that
it took some time for him to earn credibility with his employer and the public.
George Bennett was generous in his support and offered Krefft a helping hand
through the local media. In June 1862, a lengthy article by Bennett about snakes in
New South Wales was published in The Sydney Morning Herald. Bennett’s stated
aim was to list all the known species of snake in Australia for readers ‘desirous of
having some information respecting the venomous and innocuous snakes found in
the colony’. His article is sprinkled with references to Krefft’s achievements in this
area:

Mr. Krefft has done much for Australian ophiology, and has contributed
numerous facts during his short residence in the colony towards the elucidation
of many doubtful points both in specific differences, distribution and oeconomy
of these reptiles.

Bennett refers interested students to the ‘British Museum Catalogues of Snakes’
and other key publications ‘to be found in the library of the Australian Museum’—

57 Krefft’s illustrated article, ‘Beschreibung eines gigantischen Amphibiums aus der
Verwandtschaft der Gattung Lepidosiren, aus dem Wide-Bay-District in Queensland’, Archiv.
Naturgesch., vol. xxxvii, no. 1, 1871, pp. 321–324 been originally published as ‘Description of a
gigantic Amphibian allied to the genus Lepidosiren, from the Wide-Bay district Queensland’,
Proceedings of the Zoological Society of London, Nov. 11, 1870, pp. 221–224. Other references to
Krefft’s work are found in publications such as Petermanns Geographische Mitteilungen and
Das Ausland.

58 The Sydney Mail articles were reissued in the Annals and Magazine of Natural History and
Verhandlungen der K.K. Geologischen Reichanstalt (Wien).


60 ibid.
one of the only instances in the nineteenth century of a Museum representative promoting the Museum’s library in the general press.

A year after the article was published, Krefft also refers to these British Museum catalogues in a paper on frogs and snakes presented to the Philosophical Society of New South Wales, and subsequently published in the Herald.\(^61\) Krefft’s purpose in referring to these scientific works however differs from Bennett. He is not encouraging those interested in the subject to refer to these texts at the Museum but rather mentions these titles to emphasise how far local knowledge had been advanced on this subject since he started working at the Museum: ‘All this proves that, through the exertions of myself and friends, the Batrachia Fauna of Australia has been almost doubled during the last three years’.\(^62\) Krefft does not question at this early stage of his career the need to report his findings back to the metropolis, however, and without hesitation notes that he has sent undescribed frog specimens to the British Museum to be described and catalogued. Indeed, it was at this time that Richard Owen had mentioned in a report on the Department of Natural History at the British Museum that Krefft had ‘adopted the plan of having his specimens named in accordance with those preserved in European collections’,\(^63\) and that he had sent duplicates at regular intervals to London and received their names in return.

Just as Krefft had been prepared to criticise Gould’s representation of the pig-footed bandicoot, so he was equally happy to claim recognition for the discovery of new Australian species by himself and fellow local naturalists. While he never stopped corresponding with scientists around the world about his discoveries and their meaning, his preparedness to challenge the views of those around him in Sydney and in London grew over time. His early manifestation of independence and the desire for recognition of his achievements was magnified as the years went on, culminating in behaviour that drove even supporters such as Bennett to


\(^{62}\) ibid.

conclude that Krefft was ‘not fitted by temper’ for his role in the Museum and was also ‘wanting in method’.64

Given Krefft’s propensity to communicate local discoveries and trumpet local accomplishments, one might wonder how this trait was manifested in his first major publication, Catalogue of Mammalia in the Collection of the Australian Museum,65 published by the Museum in 1864. This 136 page-long catalogue was intended as a guide to the Class Mammalia displays exhibited on the ground floor of the Museum, although Krefft admits in the work’s preface that a number of the species listed are not yet held by the Museum. The inclusion of species not held by the AM points to the method used to construct the catalogue and suggests little originality in its content and presentation.

Like George Bennett, who had copied a large section of the Museum’s first catalogue from the Transactions of the Linnean Society, Krefft relied on other publications. This may have been common practice in the colonies as it seemed, no doubt, sensible in places with minimal expertise to describe the local fauna to access the most authoritative printed information available to describe both local and foreign species. Krefft lists the works he has referred to in the preface of the catalogue: ‘Dr Gray’s Catalogues of Mammalia in the British Museum, Gould’s Mammals of Australia, and Waterhouse’s History of Mammalia’,66 and all these titles had been acquired for the AML by the time Krefft had commenced his catalogue. Despite Krefft’s acknowledgement of his sources, the similarity of this work to a British Museum catalogue was noted pointedly in a review in the Annals and Magazine of Natural History, in 1865:

This Catalogue is prepared on the model of Dr. Gray’s ‘List of Mammalia in the British Museum.’ Indeed it is almost a facsimile in form and appearance, with the

66 ibid., preface.
addition of a few notes on the habits of some of the more recently discovered species, the description of three or four of which Mr. Krefft thinks had not been described before.\footnote{208}

Almost every entry for non-Australian mammals has been directly copied from John Edward Gray’s \textit{List of the Specimens of Mammalia in the Collection of the British Museum} (1843).\footnote{67} The Australian species, however, have been described with slightly more originality and in his description of the Tasmanian Devil, for example, Krefft relies less on Gray, instead sourcing his references from Waterhouse, Gould and other publications recently acquired by the AML.\footnote{68} Among the sources he cites, Krefft includes a reference to ‘Owen, Encyclop. of Anat. p.259 fig. 81.’ and provides a challenge to anyone interested in following up Richard Owen’s entry on ‘Marsupialia’ in \textit{Cyclopaedia of Anatomy and Physiology}, which was edited by R. B. Todd (vol. 3, p. 259, fig. 81).\footnote{70} In expanding on the references provided by Gray, Krefft appears to have had a mixed degree of success in communicating his sources in this early publication.

Despite Krefft’s zealousness in compiling a catalogue that was more substantial than had been envisaged by the Board,\footnote{71} distribution to institutions outside of Sydney appears to have been limited, with little evidence of the catalogue being sent to Britain beyond the major journals for review and a copy sent to the British Museum. We know, however, that a copy was sent to the scientific association in

\begin{thebibliography}{9}
\footnote{208} 'Catalogue of the Mammalia in the Collection of the Australian Museum', \textit{Annals and Magazine of Natural History}, 3\textsuperscript{rd} Series, vol. 15, 1865, p. 325.
\footnote{67} John Edward Gray, \textit{List of the Specimens of Mammalia in the Collection of the British Museum}. London: Printed by Order of the Trustees, 1843. The catalogue had been part of the first donation from the British Museum Trustees to arrive in Sydney in 1859.
\footnote{70} The Todd volume was among the books purchased by George Bennett in London and arrived in 1861.
\footnote{71} During a discussion about the pricing of the guide, the Board decided to cover the cost deficiency caused by Krefft’s longer than expected publication AMS1, Trustee Minutes, 1 December 1864.
\end{thebibliography}
Bremen and it is likely that Krefft was keen to share it among other scientific correspondents as well.\textsuperscript{72}

The mammalia catalogue was soon followed by a number of articles and included two papers on the Aboriginal people and fauna Krefft had observed on the Blandowski expedition in the late 1850s,\textsuperscript{73} a study of the fauna of Tasmania (1868),\textsuperscript{74} and a record of the advances in European and Australian museums (1868).\textsuperscript{75}

**The Maturing of Krefft’s Work and Reputation, 1869–1874**

The publication of *Snakes in Australia* in mid 1869 marked the beginning of the best years of Krefft’s scientific career. His output over the next four years in the form of field research, written communication for both scientists and the public, and his dialogue with some of the major scientific figures in the metropolis, laid the ground for a reputation that has survived into the twenty-first century. *Mammals of Australia* (1871) was the other significant monograph produced by Krefft in these years, but it has often been his smaller writings that have had the greatest impact. In recent years, Krefft’s scientific reputation rests mainly on his discovery of the Queensland Lungfish, his disagreements with Richard Owen over the marsupial lion and his promotion of Darwinism in Australia. How much of this reputation can be attributed to Krefft’s access to books in the AML is difficult to measure, but he increasingly refers to books over this period and his use of them becomes more transparent. This section will examine the way in which Krefft’s

---

\textsuperscript{72} ‘Geschenke für die Bibliothek, 1866’, Erster Jahresbericht der Naturwissenschaftlichen Vereines zu Bremen, Nov. 1864 - März 1866, Bremen: C. Ed. Müller, 1866, p. 16.

\textsuperscript{73} G. Krefft, *Two Papers on the Vertebrata of the Lower Murray and Darling, and on the Snakes of Sydney*, Read before the Philosophical Society of New South Wales, 10th September, 1862, Sydney: Reading and Wellbank, 1865; ‘On the Manners and Customs of the Aborigines of the Lower Murray and Darling’, *Transactions of the Philosophical Society of New South Wales*, 1862–1865, Sydney: Reading and Wellbank, 1866.

\textsuperscript{74} G. Krefft, *Notes on the Fauna of Tasmania*, Sydney: F. White, 1868.

\textsuperscript{75} G. Krefft, ‘The Improvements Effected in Modern Museums in Europe and Australia’, *Transactions of the Royal Society of New South Wales*, vol. 2, 1868.
access to books and specialised booksellers contributed to his work and his subsequent reputation.

**The Queensland Lungfish, 1870**

The discovery of the Queensland lungfish or *Ceratodus* (now known as *Neoceratodus forsteri*) is Krefft’s most celebrated zoological discovery and was considered important by a number of his contemporaries because of its evolutionary significance. In 1889, the scientific journal *Nature* put Krefft’s discovery at the top of the list in a retrospective of the most striking zoological discoveries of the previous twenty years.\(^{76}\) Although Krefft did not live to enjoy this particular accolade, he had never hesitated to relay, via the local press, praise he had received from the metropolis.\(^{77}\) These congratulations often related to Krefft’s skill in classifying the new species accurately, though they tended towards the patronising. Telling also is the way in which his discovery was first reported in the pages of journals and newspapers and what this story reveals about Krefft’s access to, and use of, books and his place on the international scientific stage.

On 18 January 1870, Gerard Krefft dropped a zoological bombshell: he had identified a large freshwater creature from Queensland which he thought was amphibious. It had teeth matching those of a fossil fish called *Ceratodus* and was closely allied to living examples of lungfish called *Lepidosiren*, which inhabited the rivers of Brazil and Gambia. Krefft also suggested in the article that this discovery provided a link between fossil animals and living species. Surprisingly, he chose not to trumpet his discovery in the London journals but instead revealed ‘one of

\[\text{\textsuperscript{76}} \text{To particularize some of the most striking zoological discoveries which come within our twenty years, we may cite the Dipnoous fish-like *Ceratodus* of the Queensland rivers, discovered by Krefft. ’Twenty Years’, *Nature*, vol. 16, no. 1045, 7 November 1889, p. 3.}\]

\[\text{\textsuperscript{77}} \text{In *SMH*, 9 June 1870, p. 3, Krefft noted that P. L. Sclater, secretary of the Zoological Society, London, had remarked that the *Ceratodus* from Queensland was ‘certainly one of the finest Zoological discoveries of the period’; Sir Phillip de Malepas Grey Egerton, M.P., noted ‘that this is the most important discovery that has been made in modern time’; and Dr. Albert Gunther wrote to Krefft that ‘there can be no doubt of the importance of the discovery of the *Ceratodus Forsteri*, and I congratulate you on the correctness of your determination regarding the generic character of the fish, &c.’}\]
the most important discoveries in Natural History’ in the parochial columns of *The Sydney Morning Herald*.78

Libby Robin suggests this decision to publish the new species name locally indicates a growing independence among colonial scientists,79 but Krefft had also been careful to send his description to the Zoological Society of London for publication, along with photographs, at around the same time.80 While Krefft’s decision to name the species himself rather than to send the specimen to London for classification is a shift from his behaviour in the early 1860s, we also appear to be seeing an example of colonial competitiveness where Krefft felt he needed to claim ownership of the new species in Sydney. This local focus may have been for reasons more mundane than a challenge to the metropolis and Krefft appears to have had a number of motives. The fish had been well-known to Queensland settlers for some time and it was only a matter of time before a specimen would find its way over to the scientific institutions of Europe. Krefft had also been embarrassed to admit that he had dismissed observations made to him about the fish by William Forster, Minister for Lands, some years earlier and who was the source of Krefft’s all-important specimen. The *Herald* article is in part a mea culpa and Krefft later claimed that Forster insisted that the fish should be named after him and published immediately in *The Sydney Morning Herald*.81 There is also evidence that Krefft had been guided by others in his classification of the fish and may have felt an urgency to clarify that the discovery was his alone.

Krefft’s correct generic identification of the fish could not have been done without his access to scientific literature. He reports that he had carefully packed the

78 *SMH*, 18 January 1870, p. 5.
80 Krefft’s paper was read before the Society on 28 April 1870, ‘Description of a Gigantic Amphibian Allied to the Genus *Lepidosiren* from the Wide-Bay district, Queensland’, *Proceedings of the Zoological Society of London*, Part 1, Jan-Mar, 1870, pp. 221–224.
81 Krefft reports that when handing over the specimens Forster said ‘I present them to you if you will name them after me … take them away do what you like with them but make the discovery known in tomorrow’s “Herald”.’ Gerard Krefft to Dr Richard Lydekker, 18 December 1880, Gerard Krefft Papers, ML A262.
specimen given to him by Forster and taken it immediately to the Museum, where ‘the necessary books were consulted’. Which books these were can be deduced to some extent from Krefft’s descriptions in the Sydney newspapers and a single reference he gives in his report to the Zoological Society of London. Linking the lungfish to the Ceratodus and Lepidosiren required specialised texts and the likely candidates are now identifiable through indexes of scientific literature held by the AML in the 1860s and my database mapping the chronology of growth at the AML up until 1883 (see Chapter Six).

From the beginning Krefft had identified his new discovery as belonging to the genus Ceratodus. His decision had been based on access to Louis Agassiz’s *Recherches sur les Poissons Fossiles* 1833–1843, in which there is extensive discussion of the Ceratodus and illustrations of fossil teeth (Figure 18). This title, consisting of three finely bound volumes of text and three atlases, had arrived at the Museum in 1860 along with a shipment of other books purchased with the endowment. Unfortunately, there are no annotations or markings on the surviving texts relating to Krefft’s research. No doubt with these illustrations in mind, Krefft had also compared his new specimen’s teeth, which he called ‘as old as the mountains of Australia’, with other fossil fish teeth held by the Museum to help with the classification. In 1873, with what appears candidness unexpected in someone who might be trying to impress the London establishment, Krefft admits that, unlike a ‘perfect scholar’, the only reason he persevered in trying to match the fish with a known species was that his Greek was not good enough to make up a new name! He is writing, however, some years after the discovery in response to criticism from London of his early analysis and follows his admission

---


83 L. Agassiz, *Recherches sur les Poissons Fossiles*, Neuchatel: Imprimerie de Petit-pierre, 1833–1843, vol. 3, pp. 129–136. The volumes have survived complete and have all been stamped with the library’s earliest stamp from the early 1860s. Krefft cites this work in ‘Description of a Giant Amphibian’ (1870).

84 AMS1, Trustee Minutes, 6 Sept 1860.

85 Gerard Krefft to Dr Richard Lydekker, 18 December 1880, Gerard Krefft Papers, ML A262.

by noting sarcastically that as he is ‘well-up on natural history’ his lack of erudition did not prevent him from solving the riddle.\textsuperscript{87}

The confidence Krefft showed in his writing about his classification of the \textit{Ceratodus forsteri} apparently caused his friend and AM trustee, W.B. Clarke, some discomfort. Six years after Krefft’s discovery and some time after his removal from the Museum, Clarke had been asked by Archibald Liversidge to review a paper examining the fossil fish Ctenodus, by W.J. Barkas. Barkas had credited Clarke and A.W. Scott, rather than Krefft, with making the Ceratodus connection and Clarke had asked that this be removed to avoid ‘correspondence involving us all’.\textsuperscript{88} Clarke then explained to Liversidge what had happened in January 1870:

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{87} ibid.
  \item \textsuperscript{88} WB Clarke to Archibald Liversidge, Aug 1876, Moyal (2003), vol. 2, pp. 1126–7. Despite Clarke’s request to remove the line, a note crediting him and Scott with the discovery was printed: ‘Since this paper was written I have been informed that the Rev. W.B. Clarke and Mr A.W. Scott were
\end{itemize}
\end{footnotesize}
The fact is that K. [Krefft] was told by me the name of the genus—I adding ‘you had better look into Agassiz’s Poissons fossiles’. This is when I first saw the fish (which Mr Foster told me he intended to send to me) but K. got it, & afterwards, at a board meeting I repeated its name referring to the teeth. Clarke’s interpretation of events certainly raises questions about Krefft’s account of his discovery as well as the knowledge he and Clarke had of the AML collection. Clarke was a geologist and had a strong interest and expertise in fossils and their meaning. Throughout his association with the AM, Clarke’s interest in books and scientific literature is apparent and he is far more likely to have noticed the arrival of Agassiz’s book on fossil fish in September 1860 than assistant curator Krefft, who, at this time, had been employed by the AM for less than two months. Krefft had also developed an interest in fossils and may well have referred to Agassiz’s work prior to his lungfish research, but this example of sharing information about the literature in the library appears to have not paid off well for Clarke.

Regardless of Krefft’s deductions about the Ceratodus link, he had also noted the similarities and differences of the Queensland lungfish to the Lepidosiren. A number of monographs and periodicals in the AML by 1870 contained information about the Lepidosiren. Richard Owen’s *Odontography: or, A treatise on the Comparative Anatomy of the Teeth* (1840–45) had been acquired in 1860 and included illustrations of Lepidosiren teeth. Numerous articles had been published during the forty years leading up to Krefft’s discovery and had appeared in journals such as the *Proceedings* and *Transactions of the Linnean Society of London, Proceedings of the Zoological Society of London, Natural History Review, Annales des Sciences Naturelles* and *Archiv für Naturgeschichte*. While only the publications of the Linnean and Zoological Societies were held by the Museum in 1870, many of the other European journals had been acquired by the early 1880s.

---


Two of the key tools for Krefft’s location of Lepidosiren articles in the AML would have been the indexes to recently published literature: *Bibliotheca Zoologica* (1861) and the *Record of Zoological Literature* (1865–). Krefft had requested the purchase of the former title in 1863 and had praised the utility of the latter.91

Despite Krefft’s probable attempt to catch the limelight with his discovery, the metropolis quickly took over and, within months, recognition had shifted to the work of experts such as Albert Günther of the British Museum.92 Krefft had battled with a type specimen that had been salted and gutted and he had made his classification of a lungfish without any evidence of the lungs themselves, but his expertise was limited, perhaps even more so than his library’s resources. Comments such as those published by P.L. Slater in *Nature*, in June 1870, reflected his true position in the broader scientific world:

> As regards the correct position of the *Ceratodus forsteri* in the ‘Systema Naturae’, we must, of course, wait until more specimens are procured for the examination of competent naturalists... 93

Yet from the very first, Krefft had observed this new discovery through the lens of evolution and, in what was possibly his earliest public acknowledgement of the theory, reminded his *Sydney Morning Herald* readers of a recent lecture presented by T.H. Huxley, ‘On the animals which are most nearly intermediate between birds and reptiles’,94 which had opened with the words:

> Those who hold the doctrine of Evolution (and I am one of them) conceive that there are grounds for believing that the world, with all that is in it and on it, did not come into existence in the condition in which we now see it, nor in anything approaching that condition.95

---

91 This title appeared on Krefft’s list of requisitions at the meeting of the Board for 7 May 1863 and arrived in the shipment of books purchased for the AM by Richard Owen. Record of Zoological Literature was subscribed to from the start and the first two volumes arrived in 1867.


94 *SMH*, 18 January 1870, p. 5.

Huxley’s lecture had been available to Krefft through the AML’s subscription to the *Annals and Magazine of Natural History*, though as key evolutionary texts such as Darwin’s *On the Origin of Species* (1859) or Huxley’s *Evidence as to Man’s Place in Nature* (1863) were not available in the AML, the evolutionary debate could only be followed through the AML’s periodicals, or by external sources. By 1870, the AML’s collection lacked some of the texts needed to support Krefft’s theoretical thinking and, instead, continued to represent the trustees’ anti-evolutionary view.

Krefft believed that the Ceratodus was one of a number of opportunities Australia could offer of ‘fresh links connecting the ancient fauna with that of the present day’ and he actively engaged in correspondence with some of the leading proponents of evolution in the metropolis. He corresponded with Albert Günther about the ichthyologist’s writing on the Ceratodus and was excited by his description of the fish as an ‘intermediate form’ between fish and amphibians. Exactly from whom Krefft was trying to gain his scientific independence was certainly not cut and dried.

*Krefft’s Australian Entozoa Study, 1871*

Much of Krefft’s scientific work reflects the colony’s long-term interest in the economic benefits of Australia’s ‘natural productions’. Just as his work on snakes had offered a guide to identifying those which were venomous and non-venomous, his study *On Australian Entozoa: including a list of the species hitherto recorded and description of sixteen new tape-worm colonies*, published in November 1871, was a response to problems faced by farmers with parasites in their sheep. In scientific terms, the paper is significant more because it is the first study devoted to Australian cestodes rather than because of its expertise—where the descriptions are considered poor and rely mainly on the external features of the worms. The

---

96 In 1860 the AML began to subscribe by acquiring back issues starting from 1838.
technical failure of Krefft’s cestodes work, both according to his contemporaries and from a more modern perspective, is not a handicap to our understanding of the development of Krefft as a colonial scientist. His articulation of the challenges he faced in researching and writing this paper illuminate the methods by which he accessed books and the technical equipment needed to undertake his study.

In early 1871 reports had begun to appear in the local press discussing the numbers of sheep affected by intestinal and lung worm disease. It was further reported that Dr William Morris (1831?-1903), physician, microscopist and active member of the Agricultural Society of New South Wales, had aimed his ‘penetrating lens’ at the worm and presented a report to the Society.100 A demarcation dispute ensued and John Pottie (1832–1908), consulting veterinarian to the government, not only questioned that medical doctors like Morris should be meddling in animal-related science,101 but offered the opportunity for anyone interested, including Gerard Krefft, to examine diseased sheep at his practice with a powerful microscope and to take samples for further testing.102 In late May, Krefft reported his findings on the samples he had taken in The Sydney Morning Herald and his identification of a larval parasite was strongly contested by Morris who argued that it was a parasite in adult form.103 Krefft qualifies his description with statements like ‘not having a very modern work on the subject at my command’ and ‘according to some old authors’, and completes his argument by referring to his only source on ‘our great authority on worms ‘Rudolf”—a school book he had brought with him from Germany. Krefft is clearly frustrated that there are no books by Karl Rudolphi, an expert on worms, in the AML and finishes his article by stating that ‘it would be money well spent if some of the standard books on such subjects were purchased for the Museum and the Public Library’. He also

100 SMH, 6 May 1871, p. 5.
101 SMH, 14 April 1871, p. 6.
102 SMH, 24 May 1871, p. 5.
103 Morris believed it was a sexually mature animal, Amphistoma conicum, while Krefft identified it as the larva of a distoma.
notes that he is hampered in his work by having to use a 50 year old microscope recovered from the possessions of Ludwig Leichhardt at the museum.\textsuperscript{104}

The debate between Krefft and Morris continued in the papers for a number of weeks and Krefft offered to settle the argument by sending specimens to Professors Cobbold and Owen for classification in London and offering to pay a guinea to the Blind and Dumb Institution if proved wrong.\textsuperscript{105} Morris responded to Krefft’s offer with a dead bat and instead recommended that next time Krefft tried to classify Entozoa that he should take more time and prepare his account using ‘modern works and not obsolete books’. He recommended that if Krefft read Cobbold’s description of the worm in question that he would have ‘no occasion to send it home’.\textsuperscript{106} Krefft had, in fact, seen Cobbold’s work, in a copy lent to him by William John Macleay, but insisted that there was nothing in the book that had changed his mind about his identification.\textsuperscript{107}

Despite the calls Krefft made around this time for greater independence from London, he clearly had no qualms about quickly turning to London to settle a local classificatory argument. Morris’ response is one of confidence based on his knowledge about the subject matter, his access to, and facility with, a modern microscope and access to the latest literature. He also appears, as an amateur naturalist, to be questioning the competency of a government scientist. Not only is Morris ‘astonished’ that the museum curator is ‘uttering such scientific nonsense’ but takes Krefft to task for saying he is ‘only responsible to the trustees, and not to Dr Morris, for his nomenclature of their specimens’. Morris reminds Krefft that the trustees are responsible to the government and the government to the public and with a rhetorical flourish finishes his point by stating that ‘I am one of the public’.\textsuperscript{108}

\textsuperscript{104} SMH, 26 May 1871, p. 5.
\textsuperscript{105} ibid.
\textsuperscript{106} SMH, 15 June 1871, p. 3.
\textsuperscript{107} SMH, 16 June 1871, p. 5. Morris is most likely referring to Plate 3, fig.1, Sexually mature \textit{Amphistoma conicum}, in Cobbold’s \textit{Entozoa: An Introduction to the Study of Helminthology} (1864).
\textsuperscript{108} SMH, 15 June 1871, p. 3.
The well-educated and well-resourced amateur naturalist appeared to have taken on the proto-professional Krefft—one with less experience in the subject area and fewer resources—and won. Krefft, however, was not to be beaten and on 3 July presented his paper, ‘On Australian Entozoa’ to a meeting of the Entomological Society of New South Wales. Krefft introduced his report with a caveat, explaining that he had not had access to a microscope or a standard text on the subject but that a recent loan of these tools by ‘a gentleman’ would enable him to do better work in the near future. The newly-stocked AML had let the museum curator down and, only three days after the presentation of his paper, Krefft presented a list of requisitions to the Board that included ‘some standard works in Invertebrate animals’ to the value of £15 to £20. The trustees rejected the extent of his claim and limited the purchase to £5. Not only were fewer books ordered on behalf of Krefft from Trübner & Co., but the Museum’s insistence on delivery by sail rather than the more expensive steamship meant Krefft had not received this material by the time his entozoa paper was published in November 1871.

The research sources listed in Krefft’s paper indicate that the delay of this material did not prevent access to some of the necessary literature. Trübner & Co. had written to Krefft in September advising him that he would find a complete bibliography on the subject in the two volumes being sent out to him of Cobbold’s Entozoa: An Introduction to the Study of Helminthology. While the letter and volumes did arrive in time for the publication of Krefft’s paper, his local contacts had provided him with access to Cobbold’s important text. In the same letter, the bookseller had advised that in addition to Cobbold’s work, further references were available in ‘various papers, magazines and transactions’, and it is clear that Krefft had already located a number of these at the AML. We have evidence, therefore, of a bookselling firm using its subject expertise to supply literature as well as providing an advisory role to its clients. This information-seeking

110 AMS1, Trustee Minutes, 6 July 1871.
112 ibid.
relationship between the Museum and a commercial bookseller is in marked contrast to the Museum’s earlier relationship with associates working in the sciences who had supplied books based on their expertise, such as William Yarrell, John Gould and even Richard Owen. It appears that by the early 1870s, booksellers had commandeered the role that had once been held by some metropolitan natural historians who also sold books.

A brief analysis of the references cited by Krefft in the entozoa paper can be cross-checked against what we know was held in the AML at the time he wrote the article. The publications of only four authors are cited in the work and, as previously mentioned, these do not include the largest and most recent study on the subject by Cobbold. Krefft divides the 26 page article into six sections:

1) Introduction
2) Arrangement of the entozoa by Prof. K.T.E von Siebold
3) Australian species and when first described
4) List of parasites and their hosts collected by Krefft and George Masters
5) Detailed listing of new species named by Krefft
6) Description of accompanying plates

Sections one to three provide the main clues as to which sources Krefft had access to and how he had found the information he needed. Krefft commenced his paper with a complaint about his lack of access to current literature or a microscope and then reproduced, word-for-word, (pp. 208–10) Siebold’s arrangement of the six orders within the class of Helminthes from Anatomy of the Invertebrata (1854; accessioned by the AMRL, 1860).113 Though duplicating Siebold exactly, Krefft noted that Siebold had later ‘changed his opinion’ and discussed this change by citing a translation by Thomas Huxley of Siebold’s subsequent thoughts (p. 208).114

114 C. Th. V. Siebold, ‘The Tape and Cystic Worms’ appendix in F. Küchenmeister, On Animal and Vegetable Parasites of the Human Body, London: Sydenham Society, 1857. This title was not held by the AML at this time and Krefft had accessed it elsewhere.
Krefft’s main use of references is in the section in which he provides a chronology of the discovery of Australian species (pp. 210-211). This appears to be an example of his own work rather than a transcription from another source. He starts with two early descriptions from Rudolfi’s *Entozoorum Synopsis* (1819; not held by the AML) but most of his information refers to a series of papers written by William Baird in the *Proceedings of the Zoological Society of London*, between 1853 and 1865. A catalogue from the British Museum by Baird on the subject had arrived at the Museum in 1857 and the cited Zoological Society volumes and indexes had been acquired by 1866. It is probable that Krefft located this material by either using the index or browsing the contents pages, and while he praises that ‘most useful book’ *The Record of Zoological Literature* for identifying one new instance of an Australian parasite, most of the works he cites are not listed in this important new bibliographical tool. It is also likely that Krefft had located some of this material using the copy of Cobbold lent to him by W.J. Macleay, although there is little mention in the text of Australian species. Almost all the newer literature referenced by Krefft was available to him at the Museum as were some of the older works such as Bremser’s *Icones Helminthum Systema Rudolphii Entozoologicum Illustrantes* (1824; Figure 19).

Krefft’s decision not to refer to Cobbold in his paper seems surprising and may have been a stubborn reaction to Morris’ direction to do so. Krefft articulated the challenges he faced in identifying such small specimens adequately and, while

116 Krefft cites papers by Baird which appeared in the *Proceedings* for the years 1853, 1859, 1861, 1862 and 1865.
118 In July, 1860, George Bennett’s London purchase of volumes covering 1830–1857 arrived at the AM. Subsequent volumes were acquired regularly during the 1860s.
119 ‘In that most useful book the ‘Zoological Record’, I find mention made of an Australian tape-worm from the stomach of the Emu (Dromaius novae-hollandiae), which is described by the Danish Naturalist Krabbe (Record for 1869, page 635), as Taenia australis.’ Krefft (1871), p. 211.
120 Johann Gottfried Bremser, *Icones Helminthum Systema Rudolphii Entozoologicum Illustrantes*, Viennae: Typis Antonii Strauss, 1824. This work was acquired for the AM from the first endowment and arrived from London in 1860.
Figure 19. Plate from the copy of Bremser’s *Icones Helminthium* used and cited by Krefft: ‘Hammer-headed tape worm of Rudolphi, figured by Bremser’.
Plate XV, figs. 17, 18 & 19. AMRL Folio RB169AA3.
others in the same situation may have been more circumspect in their opinion, Krefft’s sense of pride seemed to get the better of him.\footnote{Krefft tartly noted in one of his letters to the Herald: ‘Your correspondent is probably not in the habit of describing specimens of natural history as I have been for many years. At any rate, I cannot find his name in the yearly “Records”... A man who has done as much for the natural history of Australia as your obedient servant will be forgiven if he has made a mistake,’ \textit{SMH}, 16 June 1871, p. 5.} Regardless, the arrangement of his paper and use of references suggests a more sophisticated approach to his work than in the early 1860s, though it appears his work was still hampered by a lack of appropriate texts in some subject areas.

Morris had clearly developed some expertise in his study of the entozoa and, although publicly rebutting Krefft’s suggestion to send specimens to London for classification, a month later Morris sent 24 micro-samples of entozoa to Cobbold at the Royal Microscopical Society and asked him to identify them. Morris briefly related his disagreement with Krefft and Cobbold confirmed, in his report, that Morris had been correct in his original classification.\footnote{‘Proceedings of Society’s: Royal Microscopical Society, 4 October 1871’ in \textit{The Monthly Microscopical Journal}, vol. 6, 1871, pp. 243–46.} Cobbold’s analysis was reprinted in a number of Sydney newspapers in January 1872\footnote{\textit{Empire}, 25 January 1872, p. 2; \textit{SMH}, 30 January 1872, p. 3; \textit{Australian Town and Country Journal}, 3 February 1872, p. 11.} and, while Krefft’s response was not formally recorded, there is little doubt that he would have blamed his error on a lack of appropriate published material in the AML and the absence of a microscope to adequately perform the task.\footnote{A similar battle occurred between Krefft and a Dr C.W. Morgan in 1873 when Morgan complained that Krefft claimed not to have any microscopic slides of entozoa in the museum for Morgan to study (\textit{SMH}, 24 November 1873, p. 5). Krefft responded by arguing that unless Parliament voted the necessary funds, the Museum could not afford to buy a powerful enough microscope (\textit{SMH}, 26 November 1873, p. 6.).}

\textit{The Thylacoleo carnifex: Gerard Krefft vs Richard Owen, 1865–73}

In an address on Australian fossil and living animals given at Ormond College (at the University of Melbourne) in 1888, Baldwin Spencer reminded his audience of the heated \textit{Thylacoleo carnifex} debate of the 1860s and ‘70s. While the battle had
occurred primarily between members of the scientific establishment in London, it had been fuelled by contributions made by Gerard Krefft. Ann Moyal revisited this episode almost a hundred years later and provided a new perspective on what this story tells us about the growing independence of those working in scientific institutions in Australia in the late nineteenth century. Moyal characterises this palaeontological debate as an example of a new scientific assertiveness in the colony, where players such as Krefft had been emboldened by the increased stature of colonial museums and their growing collections. This example is also cast more broadly by Moyal as a battle between Richard Owen, who steadfastly argued his case within the boundaries of creational laws, and Krefft as a follower of Charles Darwin.

At the core of this argument was a dispute over the nature of the teeth of the *Thylacoleo carnifex*. Owen, a comparative anatomist extraordinaire and known as ‘the English Cuvier’, had, like his namesake, developed the reputation of one who could recreate an entire beast from a fossil tooth or pieces of fragmented bone. When Owen first identified the *Thylacoleo* as a carnivore in his article on odontology in the *Encyclopaedia Britannica* (1858), he already had a menagerie of recreated animals to his name which included the Australian *Diprotodon* and New Zealand’s Moa. Questions as to whether the *Thylacoleo* was more likely to be a herbivore were first raised in *The Sydney Morning Herald* by W.S. Macleay in 1859, but apparently made no impact. In the 1860s a number of metropolitan scientists on the evolutionary side of the fence questioned Owen’s description of the *Thylacoleo* as a carnivore. Gerard Krefft had joined the fray in the mid 1860s

---

with two contributions to British scientific journals, the second of which directly challenged the opinion of Frederick McCoy, in Melbourne, and Owen in London.\textsuperscript{130}

With Owen’s encouragement, the New South Wales government funded an expedition to the fossil-rich Wellington Caves in 1869, where Krefft and Dr Alexander Thomson, Reader in Geology at the University of Sydney, collected thousands of fossil bones and fragments. Krefft prepared a report that included photographs of \textit{Thylacoleo carnifex} specimens and, once again, he dismissed Owen’s carnivore claim,\textsuperscript{131} while sisters Harriet Scott and Helena Forde were commissioned to prepare eighteen lithographs of key specimens.\textsuperscript{132} There is no doubt that Krefft felt he was competing with Richard Owen. Fossil specimens, plaster casts and, increasingly, only photographs of specimens, were sent over to Owen for classification and lithographic illustration, while at the same time Krefft was busy restoring specimens, classifying them and organising their illustration in Sydney.

By 1870, Richard Owen had had enough of the criticism of his carnivore hypothesis and having received access to more specimen examples (many from the Australian Museum), he published a lengthy paper, ‘A Cuvierian Principle in Palaeontology, Tested by Evidences of an Extinct Leonine Marsupial (\textit{Thylacoleo carnifex})’, in which he responded to his critics.\textsuperscript{133} Krefft received less attention than some of his metropolitan colleagues in the paper but there is no doubt that he was playing in


\textsuperscript{131} 1. (b) Much worn premolar, showing that this animal could not have been a carnivore or flesh-eater; the surface is flat and not adapted for cutting (\textit{Thylacoleo carnifex}), Plate XII, Report of Gerard Krefft to the Trustees of the Australian Museum, 7 October 1869, quoted in Moyal (1976), p. 211.

\textsuperscript{132} Only a few sets of the 18 leaves of lithographed plates survive and were never published. One copy held in the AMRL RB D560.994/KRE/FOLIO RARE BOOKS.

\textsuperscript{133} R. Owen, \textit{A Cuvierian Principle in Palaeontology, Tested by Evidences of an Extinct Leonine Marsupial (Thylacoleo carnifex)}, From the \textit{Philosophical Transactions} Part 1, 1871, London: Taylor & Francis, 1871.
the big league, and even his illustration of a reconstructed *Thylacoleo* skull had been reproduced by Owen (Figure 20). Whereas the response to Owen's paper was silent in London, Gerard Krefft could not hold back and wrote a lengthy article in *The Sydney Mail* in May 1872 and saw that it was reprinted in the *Annals and Magazine of Natural History* soon after. Over the course of thirteen pages Krefft methodically picks through Owen's 'errors' with a doggedness reminiscent of Owen's own work, but the tone is sometimes shrill and disrespectful. He also imprudently accused Owen of manipulating data. Though Krefft received letters of support from some of his London colleagues, including Charles Darwin, Owen's star was rapidly fading and his resistance to evolution was of less relevance by this time. For those on the periphery in Sydney however, such as William Stephens, teacher and AM trustee, Krefft had overstepped the mark:

I return your notes on the *Thylacoleo* with the fullest conviction of the truth of your views. But I question whether a less polemical mode of argument wd. not have been more desirable. I know you had some right to feel savage at your previous work being so disregarded by the ancient Owen. But he is a mighty name...

It is this disregard shown towards Krefft’s work by Richard Owen that some have suggested was the underlying motivation for Krefft’s adoption of an evolutionary approach. Those retelling the story of Krefft and his relationship with Owen through the *Thylacoleo* debate are unable to pin down exactly when his conversion to Darwinism took place or even when he started to engage with the relevant literature. What has been lacking in the telling of this story up until now has been an understanding of Krefft’s access to literature in the Australian Museum Library and when it became available to him and how.

---


Representations of the *Thylacoleo carnifex* in the AML

The apparent linearity of a debate in the papers of published periodicals can often be misleading and creates a false chronology as we often do not know which contributors had read what, where and when while contributing to the conversation. This is particularly relevant when considering those who were geographically isolated from the centres of scientific book production. Similarly, the 1883 catalogue of the AML, as published, reveals little in terms of what library literature Krefft had available to him in the 1860s and 1870s and which works he had read. Compounding this problem is a lack of knowledge about Krefft’s own library, which is unlikely to have been large given the curator’s small income. Neither does his library appear to have had many titles not held by the AML as it was during Krefft’s compensation claim, in 1877, for over £200 worth of books he had left at the Museum when he was sacked, that he stated that much of his library consisted of complimentary duplicate copies of titles sent to him by publishers when forwarding copies for the AML.\(^{138}\) However, by accessing information from the AM’s first printed catalogue, annual reports and archival material in the

---

\(^{138}\) Krefft vs. Hill, 1877, Gerard Krefft Papers, ML A267.
database I have developed to identify the pattern of early collection growth at the AML, we can identify some of the scientific works available to Krefft at the time that he was writing about the *Thylacoleo carnifex*. (Appendix H provides a table of when relevant publications arrived at the AML and what relationship they had to the debate.)

Like so much of the Australian Museum’s early story, it was a member of the Macleay family who launched this episode in Australian palaeontological history. The ailing W.S Macleay wrote of his carnivorous doubts in a letter to the editor of *The Sydney Morning Herald* in January 1859, eighteen months before Krefft’s arrival at the AM, and based his observations on the small collection of fossil fragments of the ‘native lion’ held by the Museum at the time. He argued that the animal had ‘incisors inserted like those of the herbivorous marsupials’ and a premolar similar to the genus *Hypsiprymnus* or the kangaroo rat.\textsuperscript{139} Macleay did not report his thoughts formally back to London and his doubts left no mark in the scientific literature of the day. In August 1865, only a matter of months after Macleay’s death, Krefft appears to have felt free to publicly question the carnivorous hypothesis himself. In notes published in *Geological Magazine*, Krefft reported his findings on fossil material collected from Wellington Caves in New South Wales. His ‘attack’ on Owen’s position was so subtle that it could have been easily missed as he had simply included a question mark in his brief mention of Owen’s ‘great Australian carnivore (?)’.\textsuperscript{140} In the following year, Krefft revealed his argument and stated that the *Thylacoleo* was not furnished with canine teeth in its lower jaw and, instead, had large incisors and perhaps a small canine in the upper jaw like the *Hypsiprymnus*. Krefft then depicted his findings in a lithograph of a skull based on his observations of fossil material and of living marsupials.\textsuperscript{141} It was an argument virtually identical to that made by W.S. Macleay but Krefft had taken it further by illustrating it and publishing it in a journal recognised by the metropolis.

\textsuperscript{139} W.S. Macleay (1859), p.5  
\textsuperscript{140} Krefft (1865), p. 574.  
\textsuperscript{141} Krefft (1866), p. 148.
At the time of his first publications on the *Thylacoleo carnifex*, Krefft had little relevant material at his disposal in the AML beyond entries written by Owen in the *Encyclopaedia Britannica* (1858). Somewhat ironically, this title had been one of those purchased for the AML by Owen in 1861. Krefft did not have access to Owen’s first major paper, *Description of a Mutilated Skull*... (1859), but mentions that he had seen Owen’s ‘full description of the teeth of this animal’, which was published in *Description of an Almost Entire Skull*... (1865), but was not held by the AML. I would suggest that Krefft’s initial response (with the question mark) had been based on his confidence in the expertise of W.S. Macleay and his own experience with Australian marsupials, rather than knowledge deep enough to challenge Owen in any detail. Krefft may have lacked the fossil material needed to lead the debate, but was his reticence also caused by the lack of necessary literature in the AML to support him?

Much of the opposition to Owen’s stand was published in *The Quarterly Journal of the Geological Society of London*. The Museum’s purchase of back issues of the journal, when first subscribing in 1865, gave Krefft the forum within which he could lead his campaign against Owen’s carnivorous *Thylacoleo* and follow the arguments of others. In 1868, William Flower, zoologist and museum curator, wrote a lengthy illustrated analysis of the animal’s skull and dentition in what was a barely disguised personal attack on Richard Owen, and completed his article with a postscript in which he confirmed Krefft’s findings and credited him with being the first person to suggest the herbivore hypothesis. The AM’s copy of this article has a number of paragraph markings that reflect a particular interest in Flower’s discussion of the *Hypsiprymnus* and may well have been made by Krefft. As an associate of T.H. Huxley, Flower had been challenging Owen’s

---

142 In Krefft (1865), there is mention of a fossil discovery by Mr Beccles of Purbeck and appears to be sourced from Owen’s entry on ‘Palaeontology’, *Encyclopaedia Britannica*, vol. 17, 1858.

143 ibid.

144 Approval was granted by the Board for the purchase in May 1865 and was listed in the Museum’s annual report for 1867. AMS1, Trustee Minutes, 4 May 1865.


146 Ibid., [AMRL J551.09421/GEO/MAN;COMP]. Paragraph markings appear on pp. 308, 309, 310, 311 and 314.
creationist stand since the early 1860s and, unlike Owen, Flower had validated Krefft’s work. This volume of the *Geological Society Journal* arrived at the AML in 1869 at the same time (as we have seen in our Queensland Lungfish analysis) that Krefft had been reading the work of Huxley.\(^{147}\)

Following the discovery of more fossil material at the Wellington Caves in 1869, Krefft wanted to share his observations. Flower’s 1868 paper had been so extensive that Krefft probably felt there was little more that could be said, but he still wanted Owen to surrender. In a brief published letter to the Geological Society, Krefft reiterated his position and sent photographs and a plaster model to support his case. Owen was at the meeting in which the letter was presented and was asked to justify his view.\(^ {148}\) Needled by Krefft and challenged more articulately by Flower, Owen wrote his lengthy response in *A Cuvierian Principle in Palaeontology*...\(^ {149}\) and sent a copy directly to the AML for its collection.\(^ {150}\) Owen may simply have intended to underscore his view and authority by presenting the paper to the AM’s trustees, many of whom were old friends, but Krefft saw it as Owen laying down the gauntlet and responded with his lengthy ‘Review of Owen’s ‘A Cuverian Principle in Palaeontology...’’.\(^ {151}\) This appeared first in the local press and not long after in the scientific journal, *Annals and Magazine of Natural History*.\(^ {152}\) Krefft questions in his review the reliability of Cuvier’s method when considering new discoveries in a place like Australia. He gives an example of Cuvier making an error when classifying an Australian fossil marsupial, a rhetorical device reminiscent of Hugh Falconer’s criticism of Owen in an article about a British marsupial fossil,

---


\(^{149}\) R. Owen (1871).

\(^{150}\) The AML’s copy is inscribed with a dedication in Owen’s hand: ‘For the Library of the Museum of Natural History, Sydney, N.S.W. / from the Author.’


published in 1862,\textsuperscript{153} and subsequently cited by Flower (1868) and Owen (1871).\textsuperscript{154} By the time Krefft was composing his \textit{Review}, he had clearly caught up on a decade’s worth of literature relating to the \textit{Thylacoleo} debate not available to him in 1866, and yet, surprisingly, had still not seen Owen’s first major paper on the animal.\textsuperscript{155}

By May 1871, Krefft had shifted his position from one who had classified Australian mammals according to the rules of Cuvier to one who questioned Cuvier and advocated Darwinism. Only a month before his \textit{Review} had been published, Krefft had written an article on wombats in the \textit{Sydney Mail}, managing to slip in mentions of the \textit{Thylacoleo} on a number of occasions, and integrated ‘Mr Darwin’s theory’ with his own thoughts on the changes Australian animals had undergone over time.\textsuperscript{156} As we have seen throughout this chapter Gerard Krefft was not afraid to speak his mind, but the confidence with which he takes Richard Owen on in 1871 is very different from his first attempts in the mid 1860s. Access to a much greater volume of fossil material in 1869 provided Krefft with new and important data that gave him a home advantage, though it seems never to the extent Julius von Haast had with the Moa, in New Zealand.\textsuperscript{157} Krefft had also continued to

\textsuperscript{153} Falconer (1862), pp. 348–369.

\textsuperscript{154} ‘Cuvier and his principles cannot always be depended on in the classification of Australian fossils …it was evidently M. Cuvier who could not distinguish between the femur of a "gigantic kangaroo" and that of an elephant; and we are justified in discarding Cuvierian principles as far as fossil marsupials are concerned’, Krefft (1871) op cit., pp. 169–170. ‘If, with such a full measure of evidence before him, the position of Cheiromys in the natural system was so long erroneously contested by Cuvier, how little warranted should we be to pronounce dogmatically upon the food and habits of \textit{Plagiaulax} from the slender evidence of the lower jaw!’ H. Falconer, (1862), p. 365.

\textsuperscript{155} In August 1873, Krefft observes that he had not seen any of Owen’s papers on \textit{Fossils of Australia}, including the earliest \textit{Thylacoleo} papers. G. Krefft, ‘Fossil Mammals of Australia: A Review of Professor Owen’s papers on this subject’, \textit{Sydney Mail}, 23 August, 1873, p. 238.

\textsuperscript{156} ‘All the short-tailed bulky animals gradually disappeared, or dwindled down to the native bear or wombat of the present day. Those species which acted upon Mr Darwin’s theory of natural selection began to develop their hinder extremities and in the course of time they managed to produce long legs, and a tail to balance them; whilst the more conservative members of this ancient community took to climbing trees or to burrow into the earth for protection. It is only my idea that such was the case, and I may be wrong…’ G. Krefft, ‘Wombat’, \textit{Sydney Mail}, 6 April 1872, p. 426.

develop his expertise on Australian fauna, both through access to numerous specimens, access to the literature in the AML and through the positive responses to his writing both locally and in the metropolis.

Around the time of Krefft’s last writing on the *Thylacoleo carnifex* in 1873, there is evidence that he was becoming increasingly interested in evolutionary theory and had travelled a great distance from his early years in the Melbourne Public Library, copying out Gould plates. Krefft developed a strong interest in Ernst Haeckel, who, he wrote to Henry Parkes, was the ‘greatest of living naturalists’ for having ‘out-Darwined Darwin’, and in January 1874 Krefft ordered numerous Haeckel titles for the AML from Trübner & Co. What started out for Krefft as a passionate disagreement about teeth and a need for metropolitan recognition, had been transformed into a pro-Darwinist crusade. The great irony of the *Thylacoleo carnifex* debate is that, in the end, Owen has been proved right and Krefft’s Koala-like marsupial, was, in fact, a ferocious flesh-eater.

**Conclusion**

Krefft’s formal engagement with Australian fauna started with books in the Melbourne Public Library and ended with a bitter court case in which he accused the trustees of the Australian Museum of stealing books from him. He does not appear to have been a bibliophile like George Bennett, who displayed an interest in antiquarian material and created a large personal library, and Krefft simply used his books as a means to an end in his classificatory work. Yet as his skills developed at the Australian Museum we see books becoming increasingly important, particularly those in the AML, and we understand how deficiencies in some subject areas became an obstacle to the development of scientific staff in the colony. Krefft had a confidence that enabled him to voice opinions over matters of which he had little information and it appears he was prepared to appropriate the

---


ideas and knowledge of others to further his career. While this has not been a study of the accuracy of Krefft’s scientific work, it has shown us that there were many barriers to combining local field expertise with metropolitan knowledge in the colonies, particularly when literature was scarce. There is evidence that the course of Gerard Krefft’s career represents the transition to a more independent science in Australia, but it was a route marked by fits and starts: constrained by the conservatism of the Museum Board, stymied by Krefft’s own personality, and highly dependent on the availability of literature in the Australian Museum Library.
Chapter Five: Reading the Library: The AML’s Transition from a ‘Private’ to Institutional Library, 1858–1883.

The nucleus of a first-class library has been formed, which it is to be hoped will be annually expanded by the liberality of Parliament. But, it is to be expected, now, that the public will have free access to the stores of learning which are accumulating at their own expense. *The Sydney Morning Herald*, 22 August 1860, p. 5.

We have received from the Government Printer a very neatly printed copy of the catalogue of the library of the Australian Museum...Unfortunately there is nothing in the catalogue to show whether those books are available to the public, and if so, upon what terms. If the library is intended to be useful generally, the public should have access to it, and the trustees should cause the conditions to be published. *The Sydney Morning Herald*, 7 March 1884, p. 7.

It was only a matter of months after the arrival of the first shipment of books purchased with the Australian Museum’s book endowment, in January 1860, that expectations about public access to the new library were voiced in *The Sydney Morning Herald*. It was also at this time that the Museum’s trustees argued that the lack of space in the building prevented public access to the library collection and that they needed a new building.\(^1\) Despite the construction of the Barnet wing in the mid 1860s, the same issues about external access to the library were being raised in the press a quarter of a century later. From the Museum’s earliest years people had questioned the benefits of its public funding, but it was not until the realisation that the government was funding a museum library that a link between government expenditure and the public’s right to access the Museum’s books and supporting infrastructure was first made.\(^2\)

---

\(^1\) The Books too, which have been purchased with the funds appropriated by the Legislature to this purpose, cannot be properly arranged or classified in the present building, neither can the public have means of consulting them. *Australian Museum. Report of the Trustees of the Australian Museum, for the year Ending 31 December, 1859*, Sydney: Thomas Richards, Government Printer, 1860, p. 3.

\(^2\) *SMH*, 22 August 1860, p. 5.
The right of access to government special libraries by users not employed by the parent institution is one that has been continually debated. The restricted access is now often justified in terms of the highly specific purpose of these collections, the limited funding available to provide services to a broader user group and the ready access available to information in public libraries through the internet and other sources. Most of these arguments would have been of little relevance in early Victorian Sydney where there was limited public access to scientific literature in libraries and particularly of the calibre being acquired by the AML at this time. This lack of book resources was reflected in the Board’s call for better accommodation for the AML as well as the more general demand for the founding of a Free Public Library. As special libraries like the Australian Museum had been established in an environment with little specialised literature and, in a colony that did not establish a Free Public Library until 1869, a discussion of the perceived function of such a library and its intended users cannot be based on our understanding of special libraries in a twenty-first century context. Identifying how the AML was perceived by those who founded it, who it was actually established for, what models informed its design and whether its use changed between its creation in the 1850s and the publication of its first catalogue in 1883 are challenging questions. The apparent scarcity of related administrative information and the Museum’s long-term lack of interest in documenting key events relating to the library’s development make the task no easier. However, surviving archival fragments of book purchases, limited correspondence relating to the library’s administration, library rules, annual reports, monthly minutes of the Museum’s board and the AML’s first printed catalogue provide a framework around which an understanding of the library within its institutional context can be formed.

---

3 Peter Biskup identifies a range of common attributes among late 20th century special libraries: ‘They are generally limited to a particular subject area, serve a defined group of users and comprise distinct forms of material ... Most special libraries have but small collections, with an emphasis on current material and they tend to weed their holdings ruthlessly; and their staffs are small—a typical special library has fewer than three professional librarians, and some have only one. Most have similar problems: they tend to be isolated geographically from each other as well as from the larger collections, and they are particularly vulnerable to reduced funding when their parent body runs into financial difficulty’. P. Biskup (1995), pp. 279-80.
Over the last ten years there has been considerable debate between those working in library history about how best to approach this area of study. Alistair Black has criticised what he perceives as the limitation of focussing on library institutions and calls on those writing library history to remember that ‘library history tells us about historic societies not historic libraries’. Responses to Black have included further consideration of what is meant by the term ‘institution’ when discussing libraries and attempts to validate the use of an institutional approach. Davis and Aho argue that the duality of the library as a physical repository of ‘books and other materials’ and a repository of ‘ideas and information that are just as real as the books’ places libraries in a unique position when compared to other institutional histories. This discussion has continued and new approaches have been explored, including closer links with historians and those working in the history of the book and information sciences.

This broader approach also opens up the opportunity to trace the domestic origins of early libraries such as the AML through the history of the design and architecture of private house libraries as well as their social history. Susie West has questioned the reliance on architectural and art history to interpret English house libraries and worries that without addressing questions about the patterns of growth and decline of these book collections, the history of the book and the history of reading practices and reading communities, our understanding of these libraries is diminished. Conversely, while one might address book history and reading communities when discussing an institutional library, the design of its internal spaces and architectural and social origins can be easily overlooked.

This chapter will discuss the history of a library within the context of its parent institution but also uses evidence of such a library’s origins to better understand the early development of its institution. As a way of overcoming the limited

---

narrative about the AML, this chapter will examine both the collection and context of measurable ‘things’ that constituted the AML. The measurable things include the space in which the library was housed, the library’s books and how they were acquired, the bookcases and shelves, the stamps of ownership and the systems and rules that controlled the collection. Particular reference will be given to the AM trustees’ close association with learned society libraries and the domestic origins of these libraries. In its earliest years, the AML was virtually a gentleman’s private library within a government institution designed to look like a country house. Its location, however, in the household of museum officers and their families meant it would never be a typical house library. The transition from a ‘private’ library to an institutional library at the Museum was slow, and while the process had not been completed by the time of the publication of the first AML catalogue in 1883, the role and management of the library had clearly changed.

Infrastructure and Libraries: Evidence at the AML, 1836–1883

The Library Space

Between 1836, when the call for a bookcase at the Australian Museum was first made, and 1883, when the first library catalogue was published, no illustrations, photographs or physical descriptions have survived of the space occupied by the Australian Museum Library. There are, however, clues to this space that include the physical use of the rooms in the Museum, their configuration, their surviving interior building fabric and the occasional mention of furnishings such as shelving. This section will paint a brief picture of the earliest library’s physical space before considering the influences on the formation of such a space and its function.

The Museum had suffered a peripatetic existence since its inception in 1827 and it took almost twenty years to establish a permanent museum site. It was to be another decade before the Museum was officially opened. Governor Denison’s impact on the development of the Museum’s book collections in the mid 1850s has been discussed in Chapter Two and marks two key periods in the early history of the AML: pre-endowment (up until 1857) and post-endowment (1858 onwards).
Prior to 1858 there is minimal evidence, beyond the initial call for a bookcase, of a physical space being set aside for book collections at the Museum. The founding committee’s initial call for a catalogue to list the private book collections of its members ensured that what was, undoubtedly, Australia’s most significant scientific research resource remained private and physically separate from the institution its owners purported to support. The Australian Museum Library began its life as a place in the imagination of the Museum’s founders and appears to have gone no further by the time Alexander Macleay’s library, the core of this shared collection, went up for auction in 1845.

A small library of books was gradually acquired from the moment the new Sydney museum began to take shape on the corner of William and College Streets in the late 1840s. These books needed at least a minimal degree of management and donations from P.P. King and other local and international donors were listed by order of the Board in 1856. There is no mention of where the ‘works contained in the Museum Library’ were stored for most of the 1850s and what clues there are appear contradictory. Some sources imply that the books were stored in the boardroom while it was being used as a workroom by the curator and his assistant, while other documents suggest that the boardroom was primarily an exhibition space for plaster casts of classical statues up until early 1858 and that

7 AMS1, Trustee Minutes, 2 August 1856.

8 ’At that time [mid 1858] such volumes as the Museum possessed were stowed away in the curator’s room, and were inaccessible to general visitors...the spacious chamber formerly occupied by them is now converted into a library, furnished with some hundreds of volumes, of the best character, on natural history and other branches of science,’ SMH, Friday 24 June 1859, p. 3. This is the only source that suggests that the boardroom was being used as workroom by the curator.

9 ‘To the left of the entrance is a good-sized room, which is used as a council chamber, in which at present several of the casts presented to the Museum by Sir Charles Nicholson are placed; but the appropriateness of this room as a showroom is incompatible with its occupation as a committee or business room, for which, we are of opinion it should be returned.’Report upon the appropriation of the different rooms in the Museum, report presented to the trustees. AMS1, Trustee Minutes, 23 May 1857
the trustees were using the secretary's parlour as their meeting room, and possibly a location for books.\(^\text{10}\)

The current boardroom in the Australian Museum is one of the few surviving original spaces on the site and is the same room that has been inhabited by the committee members and trustees for most of the institution’s history. The room is situated in what was the north-eastern corner of the original building, facing onto William Street, and is an imposing space measuring 31 feet long by 18½ feet wide and with a ceiling almost 17 feet high. Upon entering through a large cedar door from what was once the Museum’s original vestibule, visitors find themselves at the western end of a rectangular room with two large internally-shuttered windows facing north towards Woolloomooloo Bay. On the wall opposite the windows is a surprisingly humble wooden fireplace, with a simple pattern bearing incised Greek key motifs that may form part of the room’s original design.\(^\text{11}\) While much of the early joinery appears to date back to the 1850s, the original plaster cornices and ceiling have not survived.

The large space provided by the new committee room was immediately attractive to local groups such as the Society for the Promotion of the Fine Arts in Australia and the Australasian Botanical and Horticultural Society.\(^\text{12}\) These groups were soon ousted when accommodation was needed for thirteen plaster casts of Greek and Roman classical statues donated by Charles Nicholson in late 1849.\(^\text{13}\) The committee room was the only completed space large enough to house the statues and the committee ordered that the walls be painted a dark red to heighten the white figures.\(^\text{14}\) In 1851 a whale skeleton joined the throng and it would seem that

\(^{10}\) ‘The present Secretary of the Australian Museum, Mr. G. F. Angas ... his private parlour is converted into a committee’ or reception room, when the trustees meet, or persons of rank visit the Museum.’ \textit{SMH}, 10 May 1858, p. 6.


\(^{13}\) ‘The Arts’, \textit{SMH}, 11 August 1849, p. 3.

\(^{14}\) Etheridge (1919), p. 361.
there was little room left for board meetings or books in what had become a public exhibition space.15

The acquisition of the William Swainson library at the beginning of 1858 was the impetus for the creation of an official library in the Museum’s boardroom. Following a call for tenders, the Board awarded a £140 contract to the firm John Hill Jnr & Sons to fit four bookcases with plate glass doors around a portion of the room (Figure 21).16 Two years later, in early 1860, shipments of books purchased with the endowment began arriving from England and ‘temporary’ open cedar shelves were immediately installed by Messrs Hubbard & Bucklands at the western end of the boardroom between the door and window, at a height to match the existing cases.17

Given the continual need for temporary shelving in the library, it is probable that the Board would have preferred to have installed fitted bookcases around the entire room at an early date. It is likely that Alexander Macleay would have liked to do the same in his library, which was said to be the ‘largest room in an Australian house’ upon its completion.18 He could not however afford the cost and, like the Museum, appears to have relied on freestanding bookcases (Figure 22a), though the current arrangement of furniture in the library at Elizabeth Bay House, managed by the Historic Houses Trust of NSW, would not have been able to store Alexander’s many thousands of volumes. W.S. Macleay remedied the situation at around the same time that the AML was being fitted out when he had the walls of the library at Elizabeth Bay lined with cedar shelving (Figure 22b).19 He also

---

15 The Statue room has now an additional attraction; a splendid skeleton of a small species of Cachelot has been set up there, and forms a most interesting study for the curious in animal physiology. ‘SMH, 7 February 1851, p. 2.

16 AMS1, Trustee Minutes, 2 Jan 1858 and 6 Feb 1858; AMS6 Outward Letter Books, G.F. Angas to Colonial Secretary, 8 February 1858. The number of bookcases was identified in the winning tender letter: John Hill and Sons to the Committee of the Sydney Museum, 5 February 1858. State Records of NSW: Colonial Architect; NRS 4332 Files concerning erection, repair, additions and alterations to Public Buildings, 1837–1912; 2/576 Australian Museum, 1842–66.

17 AMS1, Trustee Minutes, 5 January and 2 February 1860.


19 ibid., p. 67.
appears to have commissioned Francis Lewis of Sydney to make a large cedar
cabinet for the room in 1857.\textsuperscript{20} This renovation would have left little doubt that
W.S. Macleay’s library remained the best repository of scientific literature in
Sydney at the time, regardless of the competition growing down the road.

Shortly after the installation of the Museum’s new shelving, Gerard Krefft was
directed by Curator S.R. Pittard to paint Mediaeval-style paintings of religious
scriptures on the walls of the boardroom at the behest, Krefft claims, of Mrs Pittard
who was a follower of the Reverend Pusey.\textsuperscript{21} It was only a matter of days after
Pittard’s death that the Board ordered the removal of the inscriptions from the
walls and directed that in future no words were to be inscribed on the walls
without the Board’s permission.\textsuperscript{22}

There appears to have been little more done with respect to storage in the
boardroom until 1876, when the trustees decided that the shelving (probably the
‘temporary’ shelving installed in 1860) should be replaced with bookcases.\textsuperscript{23}

\begin{figure}[h]
\centering
\includegraphics[width=0.7\textwidth]{image}
\caption{Two early cedar bookcases (1860s or 1870s) provenanced to the
Museum and now located in the Australian Museum Archives.}
\end{figure}

\begin{flushright}
\textit{\textsuperscript{20} ibid., p. 69.}
\textsuperscript{21} Krefft, Disposition, 1874[?], p. 4.
\textsuperscript{22} AMS1, Trustee Minutes, 5 September 1861.
\textsuperscript{23} AMS1, Trustee Minutes, 7 December 1876.
\end{flushright}
Whether the new bookcases were installed seems unlikely as Curator E.P. Ramsay wrote to the Colonial Architect, James Barnet, requesting repairs be made to the ‘dilapidated board room’ in early 1879. The renovation was slow and Ramsay complained vigorously to Barnet in August of the same year that the room had been out of action for a number of months and was ready for its new bookcases to be installed. New shelving must have been delivered as it was deemed necessary by the Board, in February 1880, to ask the Colonial Architect to provide library steps. A sense of the book collection’s size and how it was arranged is found in Acting Curator W.A. Haswell’s proposed cataloguing strategy presented to the Board in May 1883 and reflected in the order of the printed catalogue. The books were roughly grouped by subject area on 22 bays of shelves ordered from ‘A’ at floor level up to ‘J’, with folios and large quartos placed at the bottom of the bookcases. It was also in early 1880 that Ramsay asked the Colonial Architect to arrange for the furniture in the boardroom to be ‘repaired and polished and a

---

25 ibid., E.P. Ramsay to James Barnet, 21 August 1879.
26 AMS1, Trustee Minutes, 15April 1880.
27 AMS24, Curator’s Report 17, 1 May 1883.
carpet, oilcloth or suitable matting be laid down’. The Board upgraded the request from one of renovation to renewal but was still waiting for approval for new furniture from the Department of Public Instruction almost a year later.

There are few mentions of what furniture was used in the library between 1858 and the early 1880s but we know that beyond bookcases and shelves, library steps, two office tables, and probably a large boardroom table (Figure 23) that, during S.R. Pittard’s lecture series in the library in 1860-61, thirty additional chairs were hired for the room along with a large armchair for the NSW Governor.

Finally, during the period leading up to the publishing of the AML’s catalogue, the Museum’s feverish book-buying had once more put pressure on storage in the library and Ramsay suggested that shelving should be run around the whole room to replace the old bookcases that were a waste of space and did not suit the library’s requirements. Ramsay’s wish for an entirely shelved boardroom to store the library was not enacted upon, but in 1892 the functions of boardroom and library were finally separated when a dedicated library space was created at the time of the remodelling of the Lewis wing.

This scant description of the library space up until 1883 is not without its uses. For most of this period the library was located in the Museum’s boardroom, the only space that was reserved for the Museum’s formal administrative business. The display of classical statues in this room in its early years may well have been a pragmatic decision, but the common use of this space for statuary, scholarly

---

29 AMS1, Trustee Minutes, 19 October 1880.
31 The earliest known photograph of the boardroom was taken in 1924 and shows what looks like a large nineteenth century library or dining table. The chair also visible in the photograph is one of a set of twelve and was probably acquired in the 1890s.
33 AMS24, Curator’s Report, 1 June 1882.
discussions, public lectures and ultimately the storage of books is not unlike the gentlemanly pursuits taken in an English grand private library at the time. At odds with these gentlemanly origins are the practicalities of meeting the constant pressure of providing new shelving, often ad hoc, for the Museum’s ever-growing research collection. The Museum was constantly making requests to a recalcitrant public service for shelving, replacement furniture and general repairs to a building that had been cheaply built. By the 1870s, the AML seemed less of a library for dilettantes: the purchase of a library stamp, the establishment of library rules, the cataloguing of the collection and the eventual physical separation of the books from their trustees all suggest a move towards institutionalisation of the library.

The Australian Museum Library: Both a ‘House’ and ‘Institutional’ Library

Curator and Secretary Simon Rood Pittard spent much of the brief time he was employed at the Australian Museum dying. While he had little opportunity to make an impact on the Museum between his arrival in March 1860 and death from tuberculosis in August 1861, it is the private circumstances of both his death and the departure of his sizeable family and their possessions from the Museum.
residence soon after that alerts us to a series of questions about the early role of the Australian Museum Library. It is also the way in which Pittard, fellow museum staff and the public interacted with the library space in what was, in part, a domestic rather than institutional setting, that may help us better understand the library's function in its early years and up until 1883.

The building in which Pittard spent his final days was a museum by name but also the home of a large extended family. The Museum even looked like a sizeable country house thanks to Alexander Macleay's likely interest in the construction of the building not long before his death in 1848. This section discusses the origins of the domestic model for the early museum and how it may have influenced the interpretation and use of the library space. We will also see how the practices of early British institutional libraries associated with scientific societies and museums, once closely aligned to the domestic model, began to evolve and where increased specialisation and stronger financial support from government were also evident at the AML.

**The Australian Museum: A Gentleman’s Regency Villa**

Construction of the Museum’s first, and comparatively small-scale, structure was commenced by Colonial Architect Mortimer Lewis (1796–1879) in 1846. The building has been effectively lost among subsequent additions and renovations. The dominant forms of Barnet's College Street wing, built in the 1860s, and the major extension to Lewis’ William Street wing, built by Walter Liberty Vernon in the early 1890s, have wiped away much of the exterior form of the original structure. Discussion of the design of Lewis’ building has mainly centred on its institutional function and the likelihood of its exhibition space having been modelled on London’s Hunterian Museum.\(^34\) The ‘great hall’ of the Australian Museum consisted of a space 100 feet long that rose two floors to the height of the building and had a first floor gallery encircling the room. Significant because it was Australia’s first large custom-built museum, the space was considered inadequate

\(^{34}\) Strahan (1979), pp. 1–2.
by both its administration and museum visitors by the time it was completed in 1857.

From the outside, Lewis’ building appeared more like an English country house than what might be expected of a provincial town museum. A rectangular two-storey sandstone structure built in the ‘Greek style’, the Museum’s most prominent exterior feature was a portico-in-antis sporting two massive columns of the order of the Tower of the Winds (see Figure 26d). A circular carriageway took visitors to the front door of the building from which, in its earliest days, one had sweeping views down a steep grassy slope to the waters of Woolloomooloo Bay and the harbour beyond (see Figure 24). The origin of the plan is not documented, but Mortimer Lewis has been credited with a design that is in keeping with the many public buildings he built in the Greek revival style during his tenure as colonial architect (1835–49). Unlike a number of Lewis’ other buildings, there are barely any original sketches or plans surviving of his museum. It is probable, however, that Lewis was not solely responsible for the final design. Following Dr Charles Nicholson’s successful lobbying of the Legislative Council for permanent accommodation in 1844, the Museum committee was asked to liaise with Lewis on the new building:

The Colonial Architect has accordingly been desired to prepare a plan of a suitable building for the purpose—first, however, conferring with you as to the nature of the Building to be erected, and what the situation in which it should be placed. His Excellency has, therefore desired me to request that you will have the goodness to confer with the Colonial Architect on the subject.

Lewis confirmed in February 1846 that he had prepared a plan as a result of the consultation:

I am now enabled herewith to transmit for the approval of his Excellency the Governor, the plan requested, drawn in accordance with the general views of the


36 Strahan (1979), p. 111.

37 AMS7, A:20.45/1, Colonial Secretary’s Office to the Committee of the Australian Museum, Sydney, 14 March 1845.
Figure 24. Detail of [Sydney from Woolloomooloo], 1849 by G.E. Peacock.
Mitchell Library ML 72.
Committee and although the Design is not so ornamental as I could wish, yet it is chaste and affords all the accommodation requisite for some years to come.  

Whether Lewis’ disappointment in the lack of ornamentation is a comment on the limitations of his budget or criticism of the Museum committee’s sense of taste is unclear. There is, however, little doubt that Alexander Macleay, chairman of the committee, had more than a passing interest in what was primarily a domestic vision for a museum: early museum plans not only contained possible references to his own home at Elizabeth Bay but also looked very similar to a house designed by one of his fellow Linneans back in England, 25 years earlier.

On 14 June 1821, Addison John Cresswell Baker laid the foundation stone of his magnificent new home, Cresswell House (later Hall), near Morpeth, Northumberland. The building was designed by John Shaw (1776–1832), an architect based in London who, along with his son of the same name, worked on early suburban housing developments in London as well as undertaking public, private and ecclesiastical commissions. While many of John Shaw Senior’s buildings were in the Gothic style, there are also some examples of his study of the buildings of the ancient Greeks. Built half a mile from the North Sea, Cresswell House epitomised the current interest in, and synthesis of, archaeological evidence discovered in the late eighteenth century. Not long after its completion, Shaw’s house was described in John Hodgson’s History of Northumberland as exhibiting ‘a simplicity, united to a boldness and freedom, which at first sight rivet and captivate the eye, as well as produce high ideas of the fertility and graphic correctness of the mind which designed it’. However ‘fertile’ Shaw may have been in his design, he was far from original in his use of these Greek elements. Cresswell-Baker had commissioned Shaw to either create an homage or to

---

38 AMS7, A:20.49.17, p. 3, Mortimer Lewis, Colonial Architect to the Colonial Secretary, Sydney 4 February 1846.


challenge his neighbour Sir Charles Monck, whose house, Belsay Hall, had been completed in 1817. In 1811, Shaw had visited the construction site of Belsay, barely twenty miles from Cresswell, and had been influenced by what is considered by many as the most extreme example of Greek Revivalism in Britain.

Belsay Hall, Cresswell House and the original Lewis wing of the Australian Museum all prominently featured a portico-in-antis sporting two enormous columns (Figure 25). This feature was described by John Hodgson in his early account of Cresswell as ‘very interesting and beautiful’ and he confirmed that the column capitals, like those at the Australian Museum, had been inspired by those on the Athenian Tower of the Winds (Figure 26). The use of this order in both buildings in such a distinctive manner appears more than coincidence and the links between John Shaw and Alexander Macleay confirm this. John Shaw had been a member of the Linnean Society since at least 1805 and was probably acquainted with fellow Linneans and, later, Australian Museum Committee men Alexander Macleay, William Sharp Macleay and Edward Deas Thomson. Alexander was also aware of the extensive rebuilding by Shaw of Rooksnest, a property neighbouring his country house, Tilbuster Lodge, in Godstone, Surrey. Rooksnest had been purchased in 1817 by Charles Hampden Turner, a ‘Gentleman well versed in Several Branches of Science & Natural History’. Shaw was commissioned to rebuild the house in around 1818, possibly on the recommendation of Macleay, and Turner is known to have been sharing some of the exotic plants from his

---

James Fergusson. The illustrated handbook of architecture: being a concise and popular account of the different styles of architecture prevailing in all ages and all countries. London: John Murray, 1855, vol.1, 273.

[This plate originally appeared in Stuart and Rivett’s The Antiquities of Athens (1762)]

Figure 25. Origins of the Australian Museum Lewis Wing.

‘Order of the Tower of the Winds, Athens’.


[This plate originally appeared in Stuart and Rivett’s The Antiquities of Athens (1762)]

Figure 26. Order of the Tower of the Winds.
garden with Macleay by 1819.\textsuperscript{47} Turner was listed as a member of the Linnean Society in 1820\textsuperscript{48} and, in 1821, Alexander Macleay assisted in Turner's election as a Fellow of the Royal Society.\textsuperscript{49} There seems to be little doubt that at the time that John Shaw was working on Rooksnest and probably his designs for Cresswell House as well, Alexander Macleay had developed a good friendship with Charles Turner. It may only be coincidence, but not only is there a superficial resemblance between Rooksnest\textsuperscript{50} and Macleay's Elizabeth Bay House, but elements of Shaw's Greek Revival renovation for Turner—the shouldered architraves of the internal door joinery and use of internal arches—also appear at Elizabeth Bay House.\textsuperscript{51}

There is, however, an even stronger relationship between the architectural elements of Elizabeth Bay House, such as the dome and the dimensions of the front rooms of the house,\textsuperscript{52} and the Museum's original design. There were also echoes of Rooksnest's entrance hall in the original plans for the Museum vestibule, though these were later changed. Regardless of whether the Museum's design can be primarily credited to either Colonial Architect Lewis, the Linneans Macleay and Thomson, or even classicist Charles Nicholson, the new Australian Museum looked very much like an 'English country house' in the Greek revival style. While many an English gentleman or lady new to the colony in the 1850s may have found the exterior of the museum rather provincial-looking and unfashionable when compared to architecture back at home, there were no set rules for designing

\begin{flushright}
\textsuperscript{47} 'No. 2083, Glycine Sinensis. Chinese Glycine'. \textit{Curtis's Botanical Magazine, or, Flower-Garden Displayed}, vol.46, 1819. Alexander Macleay is thanked for providing an example of this plant which he had obtained from Turner at Rooksnest.


\textsuperscript{49} 'Charles Hampden Turner', Certificates of election and candidature. The Royal Society, GB117, EC/1821/19.

\textsuperscript{50} A plate of Charles Hampden Turner's house was published in 'Rook's Nest' in Thomas Streatfeild and George Cruikshank, \textit{Lympsfeld and its Environs: Being a Series of Views, with Descriptions, of that Village and Objects of Interest in its Vicinity}, Westerham: Henry George, 1838.

\textsuperscript{51} For internal photographs of Rook's Nest see the sale catalogue, Humberts Leisure and Savills International, \textit{Rooks Nest Park, Godstone, Surrey: Formerly Streete Court School}, January 1995. Surrey History Centre, SP/3287.

\textsuperscript{52} The measurements of the boardroom of the Lewis wing (31 feet long by 18½ feet wide and with a ceiling almost 17 feet high) are almost identical to the drawing and dining rooms which are similarly positioned at the front of Elizabeth Bay House (30 feet long by 18 feet wide and with a 15 foot high ceiling).
natural history museums at this time. Carla Yanni, in her study of the architecture of Victorian natural history museums, observes that while there is no single style for these early museum buildings, many exhibit a ‘typically Victorian historicism’ and this is clearly a feature of the Australian Museum’s design. The choice of an obviously domestic model for the new building may well represent the experience and taste of the elderly Alexander Macleay and possibly his fellow committeemen. The British Museum was still housed in Montagu House at the time of Macleay’s departure to New South Wales in 1826, and was occupying a building of a domestic rather than institutional character. The Linnean Society of London had housed its collections in a number of former domestic spaces during Macleay’s period of tenure as secretary, including the home of the late Sir Joseph Banks, in Soho Square. The division can appear imprecise between what was a public museum located in an old house, a society of gentlemen with an interest in a shared collection stored in an existing or former domestic space, and the gentlemen themselves who cared for their often extensive private collections, including their books, in their homes.

In the 1830s, Alexander Macleay had built the colony’s finest example of a Greek revival villa at Elizabeth Bay to house his family, his insect collections and library. He had even intended to build a bathing house on the edge of the harbour, which, like the Australian Museum, paid homage to the Athenian Tower of the Winds. In February 1845, not long before the Museum Committee negotiated the design of the building with Mortimer Lewis, Alexander and his family had been forced, by his son, W.S. Macleay, to leave the villa as part of a strategy to save his father from bankruptcy. One might ask whether the evicted Alexander, who had settled in his country house, Brownlow Hill, had been unable to resist the opportunity to plan yet another grand ‘house’ for Sydney.

54 Ibid., p. 24.
A ‘House’ Library

There is little doubt that Alexander Macleay would have been disappointed with the new museum because it competed poorly with the numerous Greek revival villas that had been built over the previous decade on nearby Woolloomooloo Hill. Although Alexander did not get to see the finished building before his death in mid 1848, his son, W.S. Macleay, perhaps spoke for him a year later in a report examining the museum’s progress. Now residing beneath his father’s magnificent cupola at Elizabeth Bay, William observed that the museum building did not reflect the original plans and was missing a proposed dome, ‘the want of which has produced that poverty-struck appearance, so generally complained of by the public’.\(^56\) While the Museum committee had been clearly unhappy with the look of their stately ‘home’ it was never their intention to live there. Though some certainly treated it as their part-time residence—a place in which they dabbled with collections, directed museum activity and conducted their business from the boardroom—it was only ever home to the Museum’s staff and their families who lived there between 1849\(^57\) and 1888.\(^58\) Those living onsite and working as curator and secretary were relatively well-educated and respected by Sydney’s scientific community but were often treated as little more than servants by some of the gentleman who sat on the Board. This raises the question of whether the library may have been interpreted and used by the trustees in one way, while the proto-professionals and employees of the institution who lived onsite engaged with the library differently.

The Trustees

The early trustees of the Australian Museum appear not to have documented a vision for a library at the museum let alone articulated how they may have wanted


\(^57\) Strahan (1979), p. 111.

the space to be used, decorated or its furnishings arranged. Given that the museum’s exterior design emulated that of a country house, one might ask whether such a model could be applied to what we know about the library interior. There was minimal interest in developing a library at the museum until the late 1850s, by which time the museum building had been completed and Sydney’s public had more opportunity to interact with the institution. Despite the increased public access to the building, it seems that the influences on the AML’s new space and book collections had more in common with a private house library or a gentleman’s study than that of a public building.

To consider the AML as a private house library has little to do with the inability of the public to gain access to it. Rather it reflects the private experience of the trustees responsible for the creation of the library and their relationship with their books and the context in which this material was stored and used. As early as the seventeenth century the upper-class private library had been a room in which collections of curiosities, paintings and sculptures were displayed and admired and a place to which scholarly gentlemen could retreat. In the case of the AM, the curiosities took the form of skins, skeletons and fossils and, along with the collection of classical sculptures, were predominantly featured in the Museum’s gallery. It would seem then that the library was mainly a place for study and museum business rather than display. It is likely that the museum officers brought specimens for classification into the library to do their research or took books back to their workrooms or private rooms. The trustees, however, had their specimen collections at home and decided, in 1859, after the arrival of the Swainson books, that they should be ‘entitled to take from the library for a period not exceeding fourteen days, one volume at a time’. Here, for the first time, we see the adoption of society-like practices by the trustees and, paradoxically, the gentlemen who had created the library and given themselves exclusive borrowing rights were more limited in their access than the museum staff living on the site.


60 AMS1, Trustee Minutes, 2 June 1859.
One of the great influencers of architectural and interior design in Britain and the colonies during the second quarter of the nineteenth century had been John Claudius Loudon.61 His popular publication, *An Encyclopaedia of Cottage, Farm, and Villa Architecture and Furniture*, first published in 1833 and in numerous later editions, was well known in Sydney and Alexander Macleay not only kept a copy of this encyclopaedia in his library,62 but had been Loudon’s friend and correspondent for many years.63 There are numerous entries relating to house libraries in the work, but the most detailed description is contained in an article on the *Beau Ideal of an English Villa*.64 The advice is extensive and provides clues to the physical description and use of private libraries at this time:

In the present case, we will suppose it to be 23 feet in width and 35 feet long, exclusive of a bay at the end, and at least 12 feet high ... The two windows opposite the fireplace would look upon the flower-garden and the church tower rising from the trees in the park. The library, though it ought to be a handsome room, should present a great contrast to the light elegance of the drawing-room. The furniture should be substantial, the hangings of warm but dark colour. In the present instance we will choose claret or maroon colour .... The chimney-piece should be handsome, but it might be lower and heavier than in the drawing-room, and might be made of the best sorts of stone, or of British marble ... The vacant walls of the side in which is the fireplace, and that of the two ends, would be covered with oak bookcases, two thirds of their height. The lower part of the cases should be enclosed by doors of brass wire, in which might be kept the more curious and valuable books, prints, drawings, &c., the shelves above being open. In the piers that divide the cases might be closets for rolls of maps, &c. On the cornice above the cases might be a series of busts of philosophers and eminent scholars; and on the wall seen above the book shelves, scripture subjects, and portraits of distinguished authors, statesmen, &c.... The curtains should be of maroon coloured merino damask, lined with glazed stuff and trimmed with silk fringe, &c, all of the same colour.... There should be a large Turkey carpet, or an Axminster carpet, with a maroon-coloured ground, showing round it the polished oak floor, and a hearth rug to match. The library should contain an abundance of various sorts of seats and tables, made of some dark wood, the more carved the


62 Blackman (1845).


better.... As the library would be the common family sitting-room, a round table would be necessary, for tea, &c. There should be also one or two regular library tables, with drawers, and maroon leather tops.... As to the smaller ornaments to be placed about the room, they should be curious and interesting, and on no account frivolous. Handsome silver inkstands, a few curious fossils, or models of celebrated buildings; all sorts of writing-cases and implements, taper stands of silver, boxes of coins, old china in large jars, and anything of these kinds, with handsome books, -might decorate the tables ... I do not think that drawings and drawing implements would be out of their place in a library, ... every country gentleman ought to have some knowledge at least of architectural drawing, so as to be able to design the buildings to be erected upon his estate, which are now often built from the coarse plans of ignorant workmen ... When there is company in the house, the library would be the morning sitting-room for the gentlemen, who might here read the papers and new publications, write and answer letters.65

Loudon’s library is too luxurious for the cheaply constructed museum and the ‘English-style’ interior is heavier than its Greek revival counterpart, but many of the key elements of the museum’s library are described. The Australian Museum’s boardroom and library was a large and imposing room, with two windows opposite a fireplace. Perhaps its original red coloured walls were maintained when the four cedar bookcases were positioned in the room, probably one each side of the rather mean fireplace and two on the eastern wall. The large cedar doors, skirting boards and internal shutters answered Loudon’s call for a strong presence of polished wood in the room. It is probable that a substantial cedar dining or library table served the needs of board meetings and was supplemented by at least two office tables located in the room. The Museum’s large copy of a portrait of Alexander Macleay commissioned by the Linnean Society of London may well have been hanging over the fireplace in these early years,66 and where else but in the new library would one locate the terracotta bust of Shakespeare donated to the museum by Sir William Macarthur in late 1857?67 Even Loudon’s direction for

65 ibid., pp. 797–799.  
66 It is not recorded when the portrait of Macleay arrived at the AM. In 1849 the Lord Bishop of Sydney refused a request by the AM to take possession of the portrait, but we know it was cleaned by Thomas Fielding in 1882. 
67 ‘Donations to Australian Museum, During the Month of December, 1857’, SMH, 5 January 1858, p. 5.
'scripture subjects' to be featured on the wall above the bookcases was answered, if eccentrically, by the Pittards' controversial illuminations of texts from the Bible. Neither was there a shortage of Loudon's 'curious and interesting' ornaments as fossils and specimens were regularly examined by the trustees in the room.

While there are elements of a private house library in the way in which the AML space was probably presented and used, the meanness of its fittings and the workmanlike activity that took place in the room also equates with Loudon's description of the gentleman's study or business room:

A gentleman of studious habits would use his private room as a study; and here, also, he will see persons on business, and administer justice, if he happens to be in the commission of the peace... It should be a comfortable apartment, of good size, but not a handsome one. The furniture should be neat and simple. The curtains might be of moreen; and the chairs, and tables, and carpet, of any unexpensive kinds. The walls might be papered with any cheap paper; and the woodwork would probably be painted oak colour, to hide dirt. Against the wall might be hung portraits of favourite horses, cattle, or dogs; and any glazed prints. There should be, of course, a bookcase, with a good collection of books of a general kind, including law books; the best publications upon farming, building, planting, gardening, and other subjects of rural economy. Some of these might be lent out to persons living on the estate.68

The grandness of the gentleman's library and the implication of its showy erudition combined with the utilitarianism of the gentleman's office appears to bring us closer to the early trustees' understanding of the Museum's library space. The strongly identified masculinity of both Loudon's library and office and the classificatory function of a naturalist's private library as described in my discussion of the value of William Swainson's library (Chapter Three) also suggests some similarities between the gentleman's private library and that of the Society library.

68 Loudon (1833), p. 800.
The Officers of the Museum

By 1862, when Mrs Pittard departed with her regiment of children, at least four families, consisting of seven adults and nineteen children, had lived on the site.\(^6^9\) Joan Kerr observes in a discussion of Sydney’s early scientific architecture that until Barnet’s extension, the Museum ‘remained a modest Regency building, domestic in its exterior appearance and major use’.\(^7^0\) Like our knowledge of the early library, evidence of day-to-day life in the residences of the museum is little known but scattered records of building maintenance in the private spaces, evidence of relationship battles between staff, intermittent mentions of work practices on the site and newspaper advertisements relating to personal activity at the museum are useful.

In his study of Simon Rood Pittard’s role and contribution at the Australian Museum, Michael Van Leeuwen reminds us that ‘lower-status professional workers’ such as G.F. Angas, W.S. Wall, S.R. Pittard and Gerard Krefft earned little money and had minimal administrative support to undertake their roles.\(^7^1\) In lieu of higher incomes, these officers and their families received free accommodation at the museum, but seniority and arrangements made with the Board at the time of employment frequently made the sharing of the space inequitable. One of the causes of the enmity between Wall and Angas appears to have been the disparity between their accommodations. Wall was forced to live in two rooms plus a kitchen with five children, while Angas (whose residency at the museum saved the trustees £100 per annum) lived with his wife and three daughters in five rooms.\(^7^2\) Those with the lowest status, like messenger Michael O’Grady (1816?-1900), lived

---

\(^6^9\) Those I have identified up until 1862 include W.S. Wall and his five children; Michael and Elizabeth O’Grady and four children, George and Mary Angas and three daughters; and the Pittards with their seven children.


\(^7^1\) Michael Van Leeuwen, ‘Simon Rood Pittard (1821–1861) Curator of the Australian Museum’, *Archives of Natural History* 25(1), 1998, p. 11.

\(^7^2\) AMS1, Trustee Minutes, 23 May 1857. ‘Report upon the appropriation of the different rooms in the Museum, prepared by William Denison and Alexander Dawson Col. Arch.’
with his wife and four children in two rooms in the basement. A poulterer by trade, O’Grady supplemented his income by running a poultry business in the basement behind his residence. Krefft disliked O’Grady intensely and later claimed that O’Grady had spent most of his time in the 1850s preparing fowls for balls and dinner parties at which he also often waited.\textsuperscript{73}

While the museum residents had separate rooms and kitchens, they shared water-closets in an old wooden shed at the corner of the museum paddock\textsuperscript{74} and their numerous dogs wandered over the site.\textsuperscript{75} Perhaps what is most striking about the staff sharing accommodation in the museum is the apparent lack of differentiation between the private and institutional spaces. Once again, the most detailed source describing life in the museum is Gerard Krefft:

\begin{quote}
I managed as well I could, but little or nothing could be done—the house was full of children who had access to every part of the Museum—the Gallery was their chief playground. There was not a single key to be found to lock a door and the place remained open night and day till the Doctor [Pittard] died and I was appointed Acting Curator and Secretary. When this event took place, I called the men and told them that if affairs did not take a different turn we would all lose our places.\textsuperscript{76}
\end{quote}

As far as the trustees were concerned, the differentiation between the residence and museum was much clearer when it came to funding daily provisions. The Board refused to pay for Krefft’s lamp oil so he could catch up on his work at night during Pittard’s illness.\textsuperscript{77} Similarly, employees like Krefft and Pittard were expected to pay for their own servants to clean, prepare meals and nurse their children.\textsuperscript{78}

\begin{footnotes}
\item[73] Gerard Krefft (1874?), p. 2.
\item[74] G.F. Angas to Alex. Dawson, Colonial Architect, 4 March 1859. SRNSW AO 4332 2/576.
\item[75] There are a number of ‘lost dog’ advertisements placed by museum staff in \textit{SMH} between the 1850s and 1870s. The defecation by one of Wall’s dogs in the museum vestibule was cited as the source of a particular disagreement between Angas and Wall. R. Strahan (1979), p. 24.
\item[76] Krefft, Disposition, 1874[?], p. 6.
\item[77] Krefft, Disposition, 1874[?], p. 5.
\item[78] Newspaper ads for a general servant and nurse at the museum coincided with the arrival of the Pittards in March 1860, and the birth of Krefft’s son, Archibald, in 1871. Krefft also employed Michael O’Grady to prepare meals for him.
\end{footnotes}
If the children of the museum staff were indeed playing in the gallery in the 1850s and early 1860s and the museum messenger was running a poultry business in the basement, one wonders how accessible the boardroom and library may have been to those living in the museum. There is no evidence of regulations limiting access to the room and the initial ordering of bookcases with expensive glass plate doors may indicate a desire to protect the collection in an unsecured room. Perhaps the installation of open shelves in 1860 suggests access to the room had been restricted but contradicts Krefft’s claim that none of the doors were locked at this time.

While the visiting trustees may have used the library in part as a gentleman’s sitting room and study, the museum’s senior staff had their own sitting rooms in the building. These private rooms were also shared with their families and, according to the brief auction sale of S.R. Pittard’s household effects, they were well-furnished. Prior to her departure, Mrs Pittard disposed of a rosewood pianoforte and stool, rosewood card tables, drawing-room furniture, pier glasses, carpets, cut glass, china and her husband’s library of ‘valuable and scientific works’. It seems likely that these private staff libraries were stored in the museum residences but the difficulty of untangling Krefft’s personal book collection from the institutional collection, in the 1870s, signals that there was little differentiation between the book collections on the part of those using the books to do their work. The accessioning of one of the consumptive Pittard’s personal books by the AML, the poignantly titled *The Hygienic Treatment of Pulmonary Consumption* (1857), suggests that some of his collection too had become mixed with the institution’s collection.

---

79 *SMH*, 21 November 1861, 11 and 14 November 1861, p. 7.


81 B.W. Richardson, *The Hygienic Treatment of Pulmonary Consumption*, London: John Churchill, 1857. Listed as accession no. 2932 in the library register on May 17, 1888, Pittard’s ownership was noted and the book transferred to The University of Sydney on 4 October 1919.
During his time at the Australian Museum G.F. Angas had used the boardroom for his larger dinner parties, but by the 1860s Krefft appears to have applied a new discipline. Krefft and the Board declined the request of the powerful trustee W.J. Macleay to allow the Entomological Society of NSW to meet in the boardroom and, incensed, Macleay forced the reluctant Krefft, as the Society’s secretary, to host the meetings in his private rooms at the museum. If we are to rely on Krefft’s word, it would seem that the next generation of Macleay family members on the Board would have preferred to treat the museum boardroom and library as a private or society sitting room in which they ‘smoked, took P.B. and ale and told tales (often told before)’. Other trustees, such as W.B. Clarke and Dr James Cox (1834–1912)*, we know used library material for reference and classification when they visited the museum or borrowed material. It was the museum officials, however, who appear to have had the greatest access to the library and used its material regularly to classify the collection. From the late 1850s, Wall and Angas were using library material to classify specimens and this work was continued by Pittard, Krefft and later staff at the museum. The way in which access to such a rich library influenced the work of proto-professionals such as Gerard Krefft was discussed in greater detail in Chapter Four.

The domestic origin of the early library at the Australian Museum is clear, but probably the most important factor common to both the libraries of the gentleman trustees and the museum officers was the utility of the collections housed there. Despite being a symbol of Alexander Macleay’s wealth, erudition, gentility and ultimate downfall, the library at Elizabeth Bay House had been, nonetheless, a practical tool with which Macleay and his family interpreted the Australian fauna around them. George Bennett too had a practical approach to the library in his Elizabeth Street house where miniature cassowaries from New Britain camped under his library table and platypuses clambered up and down his bookcases — revealing a use of the library space that extended far beyond the simple referral to

82 Strahan (1979), p. 23.
84 ibid.
Just as the gentlemen had made practical use of their library at home and
of the libraries of their learned societies in England, the AM trustees, led by
Governor Denison, developed a library that would support the classificatory
requirements of the museum. While some of the texts purchased for the museum
library may have supplemented the libraries of the trustees nicely, many of the
core reference works acquired, such as the British Museum catalogues, primarily
served the needs of the Museum staff. Unlike in George Bennett’s time as museum
curator, staff in the 1860s were no longer solely reliant on their own inadequate
libraries or the goodwill of individual trustees.

An Institutional Government Library

There is no mention of books or a library in the first set of Australian Museum by-
laws passed by the Executive Council in 1855. Neither, for that matter, is there
mention of functions that relate to the sharing of any of its collections with the
public. The British Museum may have been the preferred model for publicly
funding and administering the Australian Museum, but until there was
significantly improved public access to the institution it was run more like a small
gentleman’s society. It was the libraries of the Linnean, Royal and Zoological
Societies in London and the Royal Society of Tasmania that offered a practical
model for a museum library in the colonies. The small-scale domestic origins of
these libraries suited an institution with an ad hoc book collection reliant on
donations, limited funding and accommodation, few employees and little evidence
of a high demand for its specialised literature. It was this model that was most
familiar to the founders of the AML.

The granting of a government endowment of £500, however, along with the annual
reporting of new book acquisitions to the NSW parliament increased the
accountability of the AML. Even though the growth of the public library system in
Britain in the 1850s and the local success of the Mechanics’ School of Arts

86 AMS1, Trustee Minutes, 1 January, 1853.
movement encouraged calls in New South Wales for greater public access to tools to improve knowledge, the Museum did not see the AML as performing this function. When proposing a government inquiry into the AM’s management practices in February 1874, the parliamentary debate touched upon the public role of the curator and the level of public access to the Museum’s collections, and while there was better management and documentation of the AM’s collections in the years that followed, there was no greater access to the AML. The society library model at the AML easily accommodated the introduction of library rules and other administrative improvements because they were minor changes and could still be managed by the Museum’s secretary. By 1883, however, it is clear that involvement by staff from the University of Sydney in the library’s management as well as strong public funding had better prepared the library for a more professional and sustainable future than many of the society libraries. Similarly, a comparison with the library of the National Museum of Victoria over this period reveals that Sydney’s museum library had remained independent from the colony’s public library and avoided the subsequent loss of identity and resources experienced by its Melbourne equivalent (for further discussion see pages 270–74 of this chapter).

**Tradition and Change in Society Libraries**

The links between the early administrators and staff of the Australian Museum and learned scientific societies in England have been well established. Many of the members of the book committee were members of the Linnean, Royal and Geological Societies of London and would have been familiar with these society

---

87 George Wigram Allen supported the motion for an enquiry because the possibility of a ‘better mode of management’ meant that ‘the institution could be made more useful to the public.’ John Stewart did not mince his words, complaining that there was ‘no sufficient catalogue of the contents of the Museum’ and that the Museum Act had been passed ‘in the dark days of the colony when it was thought a right thing to place everything in the hands of irresponsible aristocrats—the pure merino class.’ One of those ‘aristocrats’, Captain Arthur Onslow, spoke strongly against the mistake of ‘popularising’ the museum for the ‘Museum was not a lecture room, nor was the curator a lecturer... the curator should be simply a caretaker, and should keep his specimens in such a constant state of preservation as always to be available when required for scientific men.’ *SMH*, 25 February, 1874, p. 3.
libraries, their collections and their practices. Governor Denison was not only a dominant player in the development of the early book collections at the AM but, as a member of the Royal Society of London, he would have engaged with the Society’s library. The members of the Royal Society, the world’s longest surviving scientific academy, had first articulated the need for a library in 1661. The Fellows had initially agreed to donate one copy of each of their publications to the library and this collection was soon supplemented by the donation of the Arundel House library by Charles Howard. With such an early foundation date, it is unsurprising that the library should have been moved on numerous occasions before settling in its current location at Carlton House Terrace, London. Unlike many of the society and museum libraries established in the mid-nineteenth century or earlier which have had to relocate, the Australian Museum Library is distinctive in that it has remained on the one site for over 150 years.

By the 1840s, the Royal Society Library was estimated to hold 8300 scientific books in addition to its periodicals and it was at this time that the Society affirmed its focus on science rather than on general learning. The first catalogue of the collection was not published until 1825, but this 608 page volume arranged alphabetically by author was superseded by another three catalogues by the time the AML’s endowment collection had been formed in 1860. The Society’s Statutes of 1847 had opened up access to the collection and not only allowed Fellows to borrow four books at a time but let those who had obtained written permission from the president to read material in the library. The library was not, however, only used for reading, and librarian Charles Weld described how the room was used by the Fellows for drinking tea and ‘conversazione’ after their weekly

---

88 The committee appointed in 1856 consisted of W.S. Macleay (whose membership included the Linnean and Zoological Societies of London), George Bennett (Linnean and Zoological Societies), Rev. W.B. Clarke ( Geological Society of London), and Professor John Smith (who was a member of many societies in New South Wales). George Macleay was asked to assist in the purchase of books in 1859 and became a member of the Linnean Society of London in 1860.

89 Marie Boas Hall (1992), p. 31.

meetings. 91 This tradition had been established by the President, Sir Humphry Davy, who had originally hosted these entertainments in his home, but had asked to transfer the event to the library on the agreement that he defray the cost. 92 The echoes of society gentlemen meeting in each other's homes or at a local tavern for their discussions were to resonate well into the late nineteenth century both in Britain and Australia.

Neither would such a domestic setting have appeared unusual to the Fellows of the Linnean Society of London, although there were strictly no refreshments served before or after meetings. From its beginning, in 1788, the Society had rented two rooms in the house of its founder and President, Sir James Edward Smith. One room was for holding meetings while the other stored the society's library. Access to the library at this time depended entirely on what was convenient for the President. 93 Following the President’s decision to move house in 1795, the Society spent a number of years in a variety of residential buildings before settling in rooms made available in the home of the late Sir Joseph Banks, at Soho Square, in 1821. The house and collections had been left by Banks to the care of botanist, Robert Brown, who had not only made his name by botanising in Australia but had also been romantically linked to Fanny Macleay, the daughter of Alexander Macleay. Brown was the Linnean Society's clerk, librarian and housekeeper for seventeen years until his resignation in 1822.

New volumes added to the library were recorded in the Transactions of the Society from 1800 until 1855, but the first real catalogue was published in 1827. 94 This catalogue was evidently printed as a small run as it is held by few libraries and its significance was missed by the two authors who documented the Society's history.

92 ibid.
in 1938 and 1988.\(^{95}\) Like the Royal Society’s 1825 catalogue, the library is listed alphabetically by author but is much shorter at only 76 pages long. Published not long after Macleay’s departure for Australia, the catalogue stipulates that two books could be borrowed at a time for a maximum of six weeks once written requests to the Society’s Council had been approved. Thirty years later the Australian Museum trustees adopted a similar but more restrictive policy for their new library, by which time the Linnean Society had opened up access to its collection for reference to the members of other societies and ‘men of letters and science’.\(^{96}\)

What the libraries of learned societies and small museums had in common at this time was a subject area that was relatively specialised, unlike the general collections of books associated with the earlier cabinets of curiosities. In the early nineteenth century the societies were primarily interested in maintaining book collections to meet the scientific needs of their gentlemen members, while museums were focussed on having books to enable staff to classify their collections. These two functions were not mutually exclusive and were evident in a number of societies and government museums. Numerous societies, such as the Zoological Society of London, the Royal Society of Tasmania and the Leeds Philosophical & Literary Society also had museums with collections that were complemented by literature in their libraries. Museums are expensive and cumbersome to manage, however, and like many, these three societies eventually passed their museum collections onto the state, with the Zoological Society relinquishing most of its collection to the British Museum as early as 1855.\(^{97}\) While specialisation could offer a degree of flexibility to the societies, it also meant they were vulnerable to fluctuations in membership numbers, the instability of funds and accompanying accommodation problems. Following the success of the Great Exhibition in 1851,

---


there were discussions of a ‘juxtaposition’ between the Royal, Linnean, Geological, Astronomical, Chemical and Geographical Societies, and even talk of the creation of a ‘Palace of Science’. After long negotiations with the government, some of these societies were offered accommodation in Burlington House, London, and there was improved access to each other’s book collections. There was little evidence of a true juxtaposition however, and talk in the 1850s of a shared library collection went no further. These societies remained independent but had shifted from what was often a makeshift existence in a domestic setting to accommodation supplied by government that offered greater security for their book collections. Some of these societies would continue to have an influence on government science policy for many years while others withered or their interests were eventually taken over by government-funded organisations.

Similarities between London’s smaller scientific society libraries and the AML continued into the 1870s, but differences had also become apparent. Like a society, the AML had relied mainly on donations until the allocation of its £500 book endowment in 1858. Unlike some of these societies, there is little evidence of committeeemen and trustees donating their own publications to the Museum. Other than a donation by Secretary George Witt of his *Compendium of Osteology* in 1852, the library's holdings of works by trustees such as W.S. Macleay, George Bennett and Rev. W.B. Clarke do not appear to have been sourced from their authors. This suggests that these local authors did not feel a particular need to have their works represented in the AML and supports the notion that the library was primarily created for the classification of the museum’s collection and was never intended to be a showcase to a broader public. On the other hand, the acquisition of the Swainson library combined with the collection of books purchased with the 1858 endowment was of the scale and scope of a small society's foundation library and reminiscent of the type of historically formed book collections originally acquired by the Royal and Linnean Societies—with publication dates spanning decades if not centuries.

It seems extraordinary that despite almost 50 years of government funding for the Museum, powerful trustees such as William John Macleay continued to see the AM as an adjunct to their own personal interests and private collections. The government enquiry established by liberal parliamentarians in early 1874 to investigate the management style of this predominantly conservative group of trustees did not immediately break the mould. There were, however, public accusations of a misappropriation of staff and resources by trustees in order to maintain their private collections and calls for an institution that would better serve the educational needs of the public. In 1876, Dr Alfred Roberts gave notice of a motion to the Board that a letter should be written to the government in which the Board would offer to resign en masse to allow the government to reorganise the institution.\textsuperscript{99} While the motion failed, Archibald Liversidge also saw the opportunity for change and participated in a subcommittee set up to explore options for ‘more efficient management’.\textsuperscript{100} Nothing appears to have resulted from these discussions but change was in the air with the resignation from the Board by W.J. Macleay in 1877 and the death of Edward Deas Thomson in 1879. By the end of 1883, E.P. Ramsay had employed three scientific staff to work on the Museum’s collections and this, along with increased funding for scientific literature and improved library management practices, marked the real shift away from the society library model to one formed to support the needs of a government funded organisation and the work of its staff.

\textbf{AML Funding compared to other institutions}

The availability of funding for the AML became a significant point of difference between the AM and Australian and smaller English societies during this period. The AML’s book budgets were never huge, but compared strongly with the budgets of societies in Australia and provincial England and maintained a steady share of the museum’s overall budget between 1858 and 1883. Table 7 compares the amount of money spent on books by four institutions, from their earliest years to 1883, as well as each institution’s spend on books as a proportion of their overall

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
Institution & 1858 & 1883 \\
\hline
Australian Museum & & \\
\hline
British Museum & & \\
\hline
National Museum of Victoria & & \\
\hline
\end{tabular}
\caption{Comparison of book budgets by four institutions.}
\end{table}

\textsuperscript{99} AMS1, Trustee Minutes, 7 September 1876.
\textsuperscript{100} Van Leeuwen (1995), p. 334.
The institutions examined are the Leeds Philosophical & Literary Society\(^{101}\), the Zoological Society of London\(^{102}\) and the Royal Society of Tasmania\(^{103}\) and were selected as a comparison to the AML because their publications were well-represented in the AML’s collection and had first been accessioned prior to 1860; each organisation had a museum collection in addition to a library; and there is evidence of contact with each of these institutions by representatives of the AM.\(^{104}\) The main rival to the AML in these earlier years was

101 The Leeds Philosophical and Literary Society was founded in 1819 and was one of the key contributors to intellectual life, particularly in the humanities and sciences, in Leeds in the nineteenth century. A library was established in 1821 with instructions that ‘no book to be rendered inadmissible because it may have been published a long time before’. A library catalogue was published in 1867. The Society also established a museum and offered classes and lectures. From the 1870s onwards the Leeds Society went into a decline as publications and the Yorkshire College of Science competed with the Society’s lectures and the expanding suburbs of Leeds sapped the Society of a viable population. The Museum was transferred to the Corporation of Leeds in 1921 and the library donated to the Brotherton Library of the University of Leeds in 1936. Some of the AML’s earliest acquisitions were of this Society’s publications and include: *Transactions of the Philosophical and Literary Society of Leeds* (1837); *Reports of the Council of the Leeds Philosophical and Literary Society, 1830–61*; *Guide to the Museum of the Leeds Philosophical and Literary Society* (1854); and *Account of an Egyptian Mummy, presented to the Museum of the Leeds Philosophical and Literary Society by John Blayds* (1828).

102 Fellows of the Linnean Society with an interest in zoology formed the Zoological Society of London in 1826. A place in which animals could be displayed and studied was established at Regents Park and a museum and library were soon to follow. The library was started with a donation of 200 volumes by Edward Turner Bennett but by 1848 was still small at less than 1,000 volumes. The first catalogue was published in 1854 and contained the titles of 460 works, including periodicals. The library benefited from the Society’s increased income in the last quarter of the nineteenth century and in 1883 a supplement to the third edition of the library catalogue contained over 4,000 titles. By 1905, the library contained 26,000 volumes and was considered the largest and best collection of zoological works outside that of the Natural History Museum. The *Transactions and Proceedings* of the Society formed part of the AML’s original endowment purchase in 1860–61.

103 Founded in 1843, The Royal Society of Tasmania is Australia’s oldest continuous scientific society. The Society developed the Royal Tasmanian Botanical Gardens, founded a library and a museum in the late 1840s. A catalogue of the library was published in 1856 and is Australia’s first scientific library catalogue. In 1885 the Museum’s collection of natural history specimens were transferred to the State Government to form the core collection of the Tasmanian Museum and Art Gallery. The Society’s library is now housed, along with Society’s archive, in the Morris Miller Library in the University of Tasmania. One of the AM’s first recorded acquisitions was the *Tasmanian Journal of Natural Science, Agriculture, Statistics, &c*, 1846–9.

104 George Bennett made a donation to the Leeds Philosophical and Literary Society of South Pacific and Aboriginal objects in 1832 and was made an honorary member. Dr Charles Nicholson presented a paper to the Society in 1863 on ‘Australia, its present state and prospects’. The first recorded book donation to the AM was the *Catalogue of the Mammalia in the Museum of the
the library of the National Museum of Victoria (NMVL)\textsuperscript{105} and the unusual circumstances of its fifteen years of independence, before its parent institution came under the control of the Library, Museums, and National Gallery Act in 1870, is included in this discussion.

Table 7 reveals a similar pattern in the development of the libraries of the Societies in Hobart and Leeds, where in their first two decades they spend 7\% and 6\% respectively of their entire budget on books before a decline in spending sets in and reflects the limited income of these societies. It is unsurprising that an initial burst of spending is required to establish a reasonable library but whereas the amount spent on books levels out for these two societies and remains small, both the Australian Museum and the Zoological Society of London benefited from higher revenue streams although spending proportionally less of their budgets on books.

How much then was needed to establish a small specialised library in the early to mid-nineteenth century? While there is more than a thirty year gap between the founding of the Leeds and AM libraries and there was a difference in the cost of living between the two countries, there are consistencies in the amount spent within the first twenty years of the founding of these institutions.\textsuperscript{106} Leeds and

\textit{Zoological Society of London} and was delivered to Sydney by John Gould in 1839. John Gould was closely associated with the Society and a number of the AM’s employees and Trustees had papers published by the Society. Governor Denison had been supportive of the Royal Society of Tasmania when Governor of Tasmania and a number of AM Trustees and curators were correspondents and subscribers to the Society’s journal.

\textsuperscript{105} The National Museum of Victoria was founded in 1854, under the directorship of zoologist William Blandowski, and its first book purchases were made in the following year. Invoices valued at just under £900 are listed for purchases of books up until the end of 1858 in the library’s invoice book, 1855–1878. The level of purchases increased under Frederick McCoy from 1859 but from 1864 onwards museum spending was curtailed by the government. The NMVL was moved from Melbourne University to a New National Museum building in Russell Street in 1906. The NMVL has remained relatively small because of its proximity to the Melbourne Public Library. The library was relocated to the new Melbourne Museum, Carlton, in 2001. Gerard Krefft was employed at the Melbourne Museum in the late 1850s and continued corresponding and exchanging specimens with McCoy during his time at the AM.

Table 7. Spending on Books as a Percentage of Total Budget by the Australian Museum and Three Other Institutions, 1824–1883

<table>
<thead>
<tr>
<th></th>
<th>1824–33</th>
<th>1834–43</th>
<th>1844–53</th>
<th>1854–63</th>
<th>1864–73</th>
<th>1874–83</th>
<th>Total to 1883</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leeds Philosophical and Literary Society 107</td>
<td>£217</td>
<td>365</td>
<td>109</td>
<td>93</td>
<td>262</td>
<td>241</td>
<td>1,287</td>
</tr>
<tr>
<td>%</td>
<td>5.7</td>
<td>6.8</td>
<td>2.1</td>
<td>1.4</td>
<td>2.7</td>
<td>2.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Zoological Society London 108</td>
<td>£na</td>
<td>283</td>
<td>558</td>
<td>1,069</td>
<td>2,625</td>
<td>3,767</td>
<td>8,302</td>
</tr>
<tr>
<td>%</td>
<td>na</td>
<td>0.2</td>
<td>0.4</td>
<td>0.7</td>
<td>1</td>
<td>1.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Royal Society Tasmania 109</td>
<td>£na</td>
<td>na</td>
<td>504</td>
<td>754</td>
<td>391</td>
<td>360</td>
<td>1,649</td>
</tr>
<tr>
<td>%</td>
<td>na</td>
<td>na</td>
<td>8.8</td>
<td>5.8</td>
<td>4.1</td>
<td>3.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Australian Museum 110</td>
<td>£na</td>
<td>na</td>
<td>na</td>
<td>1,005</td>
<td>702</td>
<td>1,465</td>
<td>3,172</td>
</tr>
<tr>
<td>%</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>6.5</td>
<td>3.2</td>
<td>2.8</td>
<td>3.6</td>
</tr>
</tbody>
</table>

London spent £582 and £841 respectively on their libraries over their first two decades while Hobart and Sydney spent £1258 and £1707 over the same period of their development. The Australian libraries spent over 50% more than their two English counterparts on establishing their book collections and this outlay reflects not only a strong commitment to building up the initial collection in colonies with

109 Reports of the Royal Society of Van Diemen’s Land and the Royal Society of Tasmania, 1845–1884.
110 Australian Museum Annual Reports, 1854–1884.
111 The amount spent on books as reported in the financial section of the AM Annual Reports, 1854–64, totals £505. This appears not to include the foundation endowment of £500 as invoices for book purchases during this period coincidentally added to £505 but do not include any of the significant purchases made by George Bennett, Richard Owen or George Macleay in London. The endowment invoices were sent to the Audit Office in 1860 and have not survived. Therefore, this number represents the £500 endowment plus the £505 reported in invoices.
limited book resources but also the additional cost of transporting books to Australia, most of which came via London.\textsuperscript{112}

In light of the similarity of the founding costs for the libraries at the Royal Society of Tasmania and the AM, and the equivalent amounts spent in England, the investment in books by the curator of the National Museum of Victoria is extraordinary. The financial archives of the Museum reveal that between 1855 and 1869 books worth £3497 had been purchased for the Melbourne museum.\textsuperscript{113} This collection, which still holds some of Australia’s rarest and finest examples of early scientific monographs, was located at Melbourne University until 1906 when the Museum was shifted to a site adjacent to the Public Library. From the beginning, McCoy had tried to develop a library that would assist with the classification of specimens in the Museum and he had formed what was clearly an internally-focussed collection.\textsuperscript{114} Access to this collection appears to have been even more limited than the AML, no catalogue was published and the library was described in 1900 as ‘Bluebeard’s chamber whose mysteries none could penetrate’.\textsuperscript{115} As in Sydney, there were concerns about limited access to the library and Professor McCoy was required to respond to complaints made by the Field Naturalist’s Society of Victoria in 1885. McCoy’s response appears disingenuousness when he claims that most of the Museum’s books are duplicated in the collections of the Public Library and that little money has been invested in the NMVL:

\begin{quote}
I have always gladly placed at the disposal of students or visitors any books, either in my private library or belonging to the museum, not in the Public Library, which they might desire to refer to. There seems to be a mistaken notion as to the
\end{quote}

\textsuperscript{112} Local book purchases by both museums were small in their early years. Between 1857 and 1873, the AML was invoiced £372 for publications sourced locally. This was probably about 20% of all purchases made when taking into account the £500 worth of undocumented purchases made in London with the 1858 endowment. The Melbourne museum’s local book purchases during the same period were worth £365 or 10% of all purchases invoiced.


\textsuperscript{115} Hall (1901), p. 68.
It was only in the early 1880s that Sydney caught up to the overall investment Melbourne had made in its museum library, and this was despite Melbourne Museum having had significant funding challenges from 1864 onwards. The Victorian gold rush had initially served McCoy well but he resented the loss of independence to Melbourne’s well-funded Public Library, whereas the relative weakness of Sydney’s public library enabled the AML to remain independent until the 1950s.

The AML Catalogue, 1883

The five institutions discussed in the previous section all demonstrate a variety of methods by which they administered their book collections. There is evidence of registering new acquisitions in a library register, the use of stamps to identify ownership, rules pertaining to whether books can be borrowed and, if so, by whom, how many and for how long. While the National Museum of Victoria was the only one of these institutions not to publish a library catalogue, the AML’s 1883 publication date seems tardy when compared to the Royal Society of Tasmania’s 1856 publication. Many of the society and museum libraries of the period, in both Britain and the colonies, appear to have struggled to produce their library catalogues. It was often a process of fits and starts caused by insufficient funds, insufficient expertise and insufficient interest or a combination of all three. The failure of government institutions like the museum in Melbourne and the Royal Botanical Gardens in Sydney to publish library catalogues emphasises their budgetary struggles and the closed nature of these special libraries and underscores the Australian Museum’s relative success in this area.

_________________________

A significant point of difference between the AML and most society libraries was the sophistication of the AML’s first catalogue. While the Australian Museum had been slow to publish, the decision to commit resources to printing a catalogue for an ever-expanding library was never an easy one. Librarian Edward Edwards dedicated a whole chapter on this subject, *To Print or Not to Print?*, in a section on classification and catalogues in his seminal work, *Memoirs of Libraries: Including a Handbook of Library Economy*, published in 1859. Edwards balances the cheapness of the manuscript catalogue against the facility of an easily replaceable publication that could be accessed by an ‘indefinite number of students’ in multiple locations, including ‘India or Australia’.117

The limitations of searching for material in the AML’s surviving manuscript registers are as apparent now as they were in the early 1880s and proofs for the printed catalogue were presented to the Board at the end of 1883. The catalogue devised by W.A. Haswell and prepared by Thomas Fielding is not arranged alphabetically by author as was typical for most of the small library catalogues that had been produced in Britain and Australia. The catalogue is arranged primarily by subject with an author index and appears to be based on Haswell’s physical arrangement of the library in mid 1883.118 Whether Haswell had based his arrangement on a pre-existing library or catalogue I have not been able to ascertain, but his design was emulated by ex-Australian Museum employee, Alexander Morton, in his *Catalogue of the Library of the Royal Society of Tasmania*, published in 1886, which lists the AML catalogue.119 The relatively sophisticated arrangement of this catalogue is accentuated when one looks at the catalogue published by the University of Sydney in 1885,120 which is simply arranged alphabetically by author. The struggle for special libraries both small and large to publicly share their collections through printed catalogues was constant and the

118 AMS24, W.A. Haswell, Curator’s Report 17, 1 May 1883.
120 University of Sydney Library (1885).
solution articulated by the Royal Society of Tasmania in 1907 was a common one and ensured that most of these libraries remained hidden from view:

We certainly do not recommend the making of a new one [catalogue]: indeed the best catalogue for such a small limited collection is a librarian who knows his books and who pays careful attention to the constant additions which are made in their number.121

While there were two more supplements published over the next three years by the AML, the library’s first catalogue would prove to be the zenith of the public communication of its collection until at least the early 1960s, when the AML began contributing records of its holdings to the national monograph and serial union catalogues.122

The call for information about public accessibility to the AML, made in The Sydney Morning Herald in 1884, was in direct response to the publication of the catalogue.123 While the AM appears not to have responded to this question, the decision to publish such a catalogue suggests that the Museum had an intended audience beyond that of its immediate staff. The first opportunity for outsiders interested in natural history to view the AML was in August 1860, when S.R. Pittard presented the first of his science lecture series. The lectures were advertised in The Sydney Morning Herald and were initially well attended:

They are given in the museum library, and are numerously attended - His Excellency Sir William Denison, Sir Daniel Cooper, Dr Woolley, and many other leading personages in this community, being usually present.124


122 The AML contributed to the National Union Catalogue of Monographs (NUCOM) from the time of the catalogue’s establishment and was first reported in the AM Annual Report for 1960. Records of holdings being sent to the union list of Scientific Serials in Australian Libraries was first noted in the Annual Report for 1961.

123 See second quotation at the opening of this chapter, SMH, 7 March 1884, p. 7.

124 SMH, 21 September 1860, p. 7.
While the colony’s elite was well represented, reports of the ‘overenthusiastic’ response from the younger members of the audience suggests that the experience was a new one for some. We are not certain whether any of these visitors were inspired by their visit to try and access the library as there are no archives documenting visits and the written library rules only allowed trustee borrowing rights. We do know, however, that a request to borrow books was made as early as September 1860 by a Mr Rietmann, and he may well have been inspired by his attendance at the lectures and the revelation of bookcases newly filled to the brim with scientific material. Othmar Rietmann (1831–1869) was a Swiss schoolteacher with an interest in botany who had arrived in Sydney in 1858. Rietmann had taught E.P. Ramsay in 1859 at St Mark’s Collegiate School, Macquarie Fields, and continued the association when Rietmann moved to Pendrill’s School, Glebe Point. In 1860, the eighteen-year-old Ramsay was sending specimens to Curator Pittard and even suggested that Pittard should employ Rietmann as Assistant Curator. Though the job went to Gerard Krefft, Rietmann was not deterred from asking the trustees for permission to borrow books to study at home. The trustees made no other comment in their minutes other than that the request had been declined.

The information in the library was not entirely closed off however. In January 1865, Rev. W.B. Clarke wrote to his friend, naturalist and artist, Louisa Atkinson, about a watercolour she had sent him of a kangaroo, which had been collected by her brother. Happy to help Louisa, who lived in Kurrajong, to try and identify the animal, Clarke copied out some passages for her from the AML’s copy of Gould’s *Mammals of Australia*. He also invited Louisa’s brother to visit the museum when he had a chance to examine a skin of an animal that Clarke thought might have

---

128 AMS1, Trustee Minutes, 4 October 1860.
been a match.\textsuperscript{129} Naturalist friends of the trustees, both men and women, were clearly not barred from the library’s riches.

However it was not until the 1870s that we have a record of those interested in natural history and zoology actively engaging with the library. The time spent in the AML by Silvester Diggles, in 1871, was almost breathlessly described by the ornithologist when reporting back to the Queensland Philosophical Society (see Chapter Two for the description).\textsuperscript{130} Then, in October 1879, and some years before his work on the AML catalogue, W.A. Haswell asked the trustees whether he could borrow books from the library. While a friendship with William John Macleay may have been an advantage to Haswell, the Board granted permission on the proviso that Haswell sign a form of guarantee, which was ‘usual in such cases’.\textsuperscript{131} Not long after, in June 1880, the Rev. Tenison-Woods had been informed of the library rule restricting the loan of material to trustees in response to his request to borrow library material. He was told, however, that one of the trustees, Mr Mackay, had offered to take out books for him.\textsuperscript{132} It seems that the doors to the library were gradually being eased open, though the trustees’ understanding of ‘public access’ was much narrower than that proposed in the letters to \textit{The Sydney Morning Herald}.

\textbf{Conclusion}

For a decade after the formation of the Australian Museum committee, the Museum’s library resided in domestic spaces belonging to Sydney’s elite. Members of this exclusive club had access to the shared collection, but it is unlikely that few of those interested in natural history in the colony had the opportunity to see the books held by Alexander Macleay at Elizabeth Bay House or those of his fellow committeemen. With the sale of Macleay’s library during the Depression of the 1840s and a focus on funding a new museum building at Hyde Park, access to

\begin{itemize}
  \item\textsuperscript{129} W.B. Clarke to Louisa Atkinson, St Leonards, 13 January 1865 in Moyal (2003), pp. 704–705.
  \item\textsuperscript{130} S. Diggles, ‘A Short Account of the Trip to Cape Sidmouth and Back, in the Governor Blackhall,’ \textit{Transactions of the Queensland Philosophical Society}, 1, 1872, p. 2.
  \item\textsuperscript{131} AMSI, Trustee Minutes, 2 October 1879.
  \item\textsuperscript{132} AMSI, Trustee Minutes, 18 June 1880.
\end{itemize}
scientific literature for the staff at the Museum remained limited to a few donations, private book collections and the sparse scientific resources of the Australian Subscription library. The passing of the Museum Act in the 1850s, the chairmanship of Governor Denison and the near completion of the new museum provided a setting in which the Board began developing the collections for display and exchange and identified the need for scientific literature to support this work.

Until the late 1850s, members of the Board had shown little interest in the scrappy collection of donated volumes stored in the museum. There had been little funding to support the aspirations of the early book committee and the collection, which had been formed more by accident than intent, was not considered worth the cost of a library stamp. While the purchase of the Swainson library and granting of the £500 endowment in 1858 set a new course for the Museum’s approach to developing its book collection, the understanding of the library by many of its trustees was informed by their experiences of their private libraries and their association with learned society libraries in Britain.

Calls to open the AML to the general public in 1860 were partly heeded by the Board when it instructed Simon Rood Pittard to present a series of scientific lectures in the new library. Attendance at the lectures was excellent, but subsequent requests by naturalists to borrow library material were refused. The establishment of the Free Public Library of NSW in 1869 most likely relieved most of the pressure to open the AML to the public, though there is evidence that some naturalists were gaining access to the book collections from at least the 1870s onwards.

Like most learned societies, the interests of the Australian Museum’s board members were paramount and while governments attempted to dictate terms from time to time, the colonial elite represented on the Board often prevailed. The private interests of some of the dominant trustees continued to influence management at the Museum until the resignation of William John Macleay, the last representative of the Macleay family, in the late 1870s. Yet while the trustees seem to have treated the AML as a private or society library in its early years, there were
some fundamental differences that appear to have ensured a more robust and sustainable library than many of its society counterparts. The trustees may have been closely involved in the selection of many of the titles purchased with the first endowment, but there was less of a sense of ownership than might have been the case in a society library. Except for P.P. King’s donation of part of his library prior to his death in 1856, few trustees made donations to the AML. It is possible that the proto-professionals living at the museum felt more proprietorial than the trustees—they were not only using the library in their daily work but often in tandem with their own libraries located in their residences onsite.

Perhaps the two main differences contributing to the AML’s solid start when compared to many society libraries was strong, sustained funding and the continued need for an updated library for classificatory work. Whereas many society libraries were stunted by the limiting of revenue once a core library had been established, the Australian Museum had its budgets increased. While society libraries often reached a point where they were seen as less relevant by a changing membership or suffered under competition from other libraries, the AML could afford to acquire current as well as historical classificatory material and faced no real competition from other libraries in New South Wales in the nineteenth century.

The AM trustees’ experience with learned societies in Britain combined with some reasonable public funding appears to have provided a good foundation for the AML. The trustees had expectations of what this sort of library should be like and purchased a solid collection to match. The main users of the AML were the museum officers and as the expertise of these staff developed, so too did the expectations of what sort of library material was needed. While the Museum may have been happy to share with the public the quality of its library’s holdings in 1883 through its new catalogue, the growing specialisation of its collection would prove to be as much a barrier to public access as had the self interest of the gentlemen naturalists running the museum some thirty years earlier.
Chapter Six: Creating the Canon: Developing the AML’s Collection, 1836–1883

Historic libraries are ... greater than the sum of their parts, as such a library which has been kept together captures an overview of individual or collective tastes at different points in time. Knowing the contents of private and institutional libraries of the past allows us to compare them with other collections over the centuries, looking at average sizes, changing trends in language or subject, and in the place of origin of the books.¹

‘Knowing’ the early contents of the library at the Australian Museum seems at first glance an overwhelming prospect. To know which of the estimated 200,000 volumes currently held by the Australian Museum Research Library were acquired prior to the publication of the library’s first catalogue in late 1883, and under what circumstances, has been of interest to individual scientists but of little interest to the institution. Knowledge about the nineteenth-century development of the AML’s collection is minimal. As we have seen in previous chapters, printed and archival material such as the 1883 AML catalogue, the library register, annual reports, financial records, board minutes and museum correspondence provides us with a rich combination of data about how the library collection was formed, particularly in the third quarter of the nineteenth century. Using these sources and the 1883 catalogue as the draft inventory of the early library, this chapter will cast light on the origin and currency of the printed material acquired, subject interests, the local scientific network, bookseller relationships, intellectual influences, favoured formats and collection strengths and weaknesses between 1836 and 1883. A study of how these elements varied overtime will be followed by an evaluation of the significance of the early library as a whole.

Identifying the Content of the AML, 1836–1883

The earliest and most substantial attempts to describe the history of the library were made by the Museum’s Curator of Ichthyology and self-proclaimed historian, Gilbert Percy Whitley, in his manuscript history of the Museum and in a brief document he co-wrote with the Museum’s Librarian in 1962.\(^2\) In little more than six pages of notes on the library in his History, Whitley mentions his frustration that despite ‘voluminous manuscript notes on the history of the Australian Museum left behind by the former librarian [William Alfred Rainbow (1886–1958)*], surprisingly little mention is made of our books or librarians’.\(^3\) While it appears that the Australian Museum annual report was Whitley’s main source of information, he also mentions a failed search of the Museum’s ‘old files’ in an attempt to locate a catalogue of the William Swainson library, purchased in 1858.\(^4\) G.P. Whitley’s scant observations continue to form the basis of the brief library history currently available on the Museum’s webpage\(^5\) and there has long been a need to consider which sources, particularly those within the museum, could assist in clarifying the development and function of the early printed collection.

In Chapter Two, a number of archival sources held by the Museum, such as book invoices, book purchase correspondence, board of trustee minutes, annual reports and incoming and outgoing letter books were examined. The information resulting from these sources, while unexpectedly extensive, is highly fragmented and presents a distinct challenge in forming a coherent narrative of the development of the collection. To underpin these various elements I have turned to the AML’s first printed catalogue, published in 1883.

\(^4\) ibid., p.5. Given that the archives of the Museum were not formally arranged nor a guide written until 1986, it is little surprise that Whitley had difficulty locating material.
Small libraries tend to be slow at getting their often haphazard, accidentally acquired collections into order and rarely have a catalogue. The gradual growth of a small library such as the AML meant that its collection remained relatively manageable and books were easy to locate. It was inevitable, however, that as the collection grew its users found it increasingly difficult to navigate and to locate the information they were seeking. As early as 1856, Secretary G.F. Angas was instructed by the Trustees to make a list of the library’s holdings but this document no longer survives if, indeed, it was ever compiled.6 Following the dismissal of Gerard Krefft in 1874, an inventory of the specimens and books of the museum was constructed,7 though apparently unavailable to curator E.P. Ramsay in 1877, who prepared a list of books based on book invoices filed at the Museum because ‘no catalogue of the books in the library was in existence’.8 Ramsay’s stop-gap catalogue would have been of limited use as these invoices covered only some of the previous fifteen years’ purchases;9 and so, in late 1880, a cataloguer was employed for a month to catalogue the library.10 Lack of funds prevented the completion of the cataloguing and it was not until 1883 that the Museum employed Thomas H. Fielding, on the recommendation of R.C. Walker of the Free Public Library, to create an accession register and complete a catalogue for publication.11

Acting Curator William Haswell proposed a system of physically arranging and classifying the collection and compiling a printed catalogue to the Trustees in May 1883.12 His report suggested a traditional method of arranging the collection by

6 AMS1, Trustee Minutes, 2 August 1856.
7 ‘Mr Hill reported that he had finished the catalogue of the specimens, and of the books in the library’. AMS1, Trustee Minutes, 30 July 1874.
8 Unidentified newspaper clipping detailing proceedings of the case Krefft vs. Hill, 1877, in Gerard Krefft Papers, ML A267. Ramsay testifies to the lack of a pre-existing catalogue and that he constructed one from Trübner & Co. receipts documenting some of the book purchases by the Trustees for the library. These invoices have survived AMS7, F:11—F:11.80, [Book invoices and book purchase correspondence], (1857–1884).
9 The earliest Trübner & Co. invoice is for 1863 and there were other significant purchase made from other booksellers during this period. AMS7, F:11 - F:11.80.
10 AMS7, Letters Received 1853–1883, F:13.80.
11 AMS24, Curators’ Report no. 17, 1 May 1883.
12 ibid. Presentation of this report is noted in the Board of Trustee Minutes. AMS1, Trustee Minutes, 7 May 1883, p. 528.
subject, allocating a shelf number and listing books in a register that would be ordered by an allocated accession number. The printed catalogue followed a model that had been used by other small libraries for many years, where the titles were divided up by subject area and ordered alphabetically by author within these categories. Books covering a number of subjects were entered in each corresponding subdivision of the catalogue and, if desirable, an index was included. As has been discussed in Chapter Five, the choice of subject headings not only appears to reflect Haswell’s academic work at the University of Sydney, but the organisation of the records reveals the physical arrangement of the collection. The catalogue was approved by the Board and printed by Thomas Richards, Government Printer, in December 1883.

The *Catalogue of the Library of the Australian Museum* appeared almost exactly as Haswell had proposed. The octavo, soft-covered volume was 178 pages long, consisted of eight divisions with the first, *Zoology*, broken down further into nine sections. Additional access to the records was provided by an 85-page index. The records were divided as shown on the index (see Figure 27). The information contained in each record includes author, title, place of publication, number of volumes, size of volumes, series title if relevant, and shelf location (see Figure 28).

At first sight this catalogue appears an excellent way to evaluate the AML’s collection at the time of publication. While one can get a quick sense of the titles held and which authors are represented, the duplication of records in multiple subject areas (1515 records in all) makes it virtually impossible to analyse the collection in terms of its true size, the true proportion of author representation, a breakdown of the source countries of publication, the languages represented, the various formats, or the representation of illustrative material. Although there was

---


14 AMS24, Curators’ Report no. 35, 11 December 1883.
Figure 27. Classification scheme used in the AML’s 1883 catalogue.
CLASS A.

ZOOLOGY AND COMPARATIVE ANATOMY.

A1.—MAMMALIA.

ALLEN (J. A.) American Bisons, living and extinct. Plates. 4to. 11 B
Camb., Mass., 1876.

History of the North American Pinnipeds: a monograph of 11 C
the Walruses, Sea Lions, Sea Bears, and Seals of North
America. U. S. Geological and Geographical Survey of the

On the Eared Seals (Otariidae); with descriptions of the North 11 C

On the Mammals and Winter Birds of East Florida; and Sketch 11 C

ANDERSON (John). Catalogue of Mammalia in the Indian Museum, 1 D

AUDUBON (J. J. and J. Bachman). Viviparous Quadrupeds of 11 B

BÉNEDEN (P. J. van, et P. Gervais). Ostéographie des Cétacés 32
Vivants et Fossiles, comprenant la description et l’Icono-
graphie du Squelette et du Système Dentaire de ces
Animaux. Text and plates. 2 vols. 4to. and folio. Paris,
1877–80.

BONNATERRE (L’Abbé). Cétologie. Enry. Métho. 4to. Paris, 1789. 9 D
Burmeister (H.). Pontoporeia. See DESCRIPCION.

BRYANT (Charles). Account of the habits of the Northern Fur 11 C

CÉTOLOGIE, par L’Abbé Bonnaterre. Enry. Métho. 4to. Paris, 1789. 9 D


DESCRIPCION de cuatro espècies de Delfinidos de la Costa Argentina 11 A
en el Oceano Atlántico. Plates. Anales del Museo Público

4to. Paris, 1820.

Figure 28. Page from the AML Catalogue, published in 1883.
an estimated collection size of ‘almost 4,000 volumes’ in 1884, the library catalogue provides no indication of how the library had grown over the previous 50 years, or offers clues to acquisition patterns that may cast light on intellectual and political influences during this period. Neither can we turn to the library register for information about the earlier growth of the library because the older volumes were simply listed randomly in the newly created register in 1883.

**Catalogues, Electronic Databases and Library History**

Since the Second World War, the intensive development of short-title catalogues and large-scale union catalogues has provided new information about authorship, printing, publications and surviving copies and given opportunities to explore the history of libraries, collecting and reading. David McKitterick argues that while these short-title catalogues offered a breadth not previously attainable, they were self-limiting by national or linguistic boundaries and unable to capture the true extent or nature of book-related activity at any given time or place. To complement the data available in these larger catalogues, there have been numerous studies based on printed and manuscript catalogues of individual private, commercial and institutional libraries. Jason Scott-Warren in his study of the book purchases of Sir Thomas Cornwallis in the sixteenth century emphasises how important such case studies are in supporting research projects employing much larger data sets. This qualitative approach to library history has been

---

15 C.W. Holgate collected his statistics during a visit to the library in 1884 and these were subsequently published in C.W. Holgate, *An Account of the Chief Libraries of Australia and Tasmania*, London: Chiswick Press, 1886, p. 44.

16 Approximately the first 1,000 accession numbers in the register represent the core of the pre-existing library. However, a number of pre-1883 accessions were missed during the cataloguing process and were not found until years later, in some cases. As a consequence, some of the earliest acquisitions look like they arrived in the library considerably later.


18 ibid., p. 162.

common in Australia and is represented, most recently, by such research as Keith Adkins’ monograph on the early history of the Evandale Subscription Library.  

Lately, we have seen a flourishing of projects around the world in which pre-electronic library catalogues are converted into an electronic format to facilitate an understanding of the distribution of books, the patterns of ownership and how these works were read. In some cases book lists have been combined to form electronic union catalogues, such as in *Private Libraries in Renaissance England*, while in other instances historical loan records of single or multiple libraries, like Muncie (Indiana) Public Library and the combined records of another five public libraries from the American Midwest, have been electronically captured to form searchable databases. In Australia, an electronic catalogue was developed in 2003 to capture the collection of the Sandhurst Mechanics Institute and Free Library (1854–1946), stored at La Trobe University Library, Bendigo, and in which it was intended to not only include bibliographical details of the collection’s titles but also information about accession history, bindings, physical evidence relating to use and original library classification numbers. The aims of this project were expanded in 2006, when Peter Thompson, Information Systems and Resources Librarian, La Trobe University Library, reported on his development of a borrower’s database that would link the online catalogue of the collection to the borrowing data of patrons. Preliminary analysis of the collection and its use

20 Adkins (2010).
looked promising but I have been informed by Jeanette Dazkiw, Bendigo Campus Library Manager, that development of the database ceased with the departure of Thompson from La Trobe University Library and this information is no longer publicly accessible.25

While the previous studies have relied, in part, on the conversion of existing print or manuscript catalogues into an electronic format, we have also seen the launch of a number of electronic databases formed by the retrospective cataloguing of historical private libraries. These range from single libraries such as Sir John Soane’s Museum Library,26 geographically grouped collections like the Yorkshire Country House Partnership Libraries Project,27 and large union catalogues corporately formed by institutions like the National Trust in the United Kingdom.28 In Australia, I am currently involved in the development of the Historic House Libraries Database, in which the house libraries and sheet music of the Historic Houses Trust of NSW are being catalogued and will be made available in the form of electronic records as well as some digitised copies.29 All of these catalogues have been created with the material text in mind and include copy-specific information that ranges from provenance to booksellers’ labels and provide varying degrees of flexibility when it comes to extracting more detailed information about these collections. At their core, however, these are catalogues typical of many special collection departments in libraries and do not provide additional information that might be available in early catalogues (such as original subject classification or shelf location), registers, archives, the use of library stamps or other sources.

A less orthodox, but nonetheless interesting approach to documenting an historical library was taken by Fredrik Åström and Lennart Pettersson in their attempt to

29 *Historic House Libraries Database*, URL yet to be determined.
use a catalogue to articulate, via an electronic database, the intellectual and aesthetic ideals that lay behind the nineteenth-century library of the Scandinavian Association in Rome. The study relied on a bibliometric method using co-citational frequency analyses of authors, language, and subject keywords. While some conclusions were drawn from the frequency of authors, subject keywords and languages, a number of stumbling blocks were identified by the authors in their choosing of 1500 titles published prior to 1870 from the catalogue of a library that is still active:

The basic assumption for the analysis is that the library collection of an institution in some part reflects the activities or ideas held by it and that a quantitative analysis of the collection can reveal patterns in these activities and ideas. However, there are reservations to be made about this assumption, one being that the origin and purpose of the individual acquisitions of the library are not known. Material bought by the library can be assumed to serve a distinct purpose for the association and in some way reflect the ideas and activities of the SAR, while gifts to the library introduce an element of randomness. Another reservation is that material printed before 1870 might have been added to the collections at a later point.

The lack of knowledge about the development of the collection and the acquisition patterns clearly limited the conclusions that could be made about it. Similarly, all the databases I have mentioned provide varying levels of access to data depending on their purpose, functionality, the period of time they cover and whether their records are representative of part or the whole of a book collection.

Except for the Åström and Pettersson example, all the studies I have cited relate to limited and predefined collections that have been quarantined from larger collections and remained static. The Australian Museum Research Library does not fit into this category, as it is an active collection that has continued to grow and evolve for over 150 years. Access to the collection is limited to a combination of electronic and card records and, while these records often include useful notes

31 ibid., pp. 220–221.
about specific copies, it is not usual practice for libraries to provide information about the acquisition history of each item. However, in recent years the Library Manager of the AMRL has been prioritising the electronic cataloguing of rare-book material and the inclusion of detailed provenance notes.

**Creating ‘A Nineteenth-Century Library Management System’**

Any contemporary librarian is conscious of the advantages of an electronic library management system (LMS) in co-ordinating library activities. The four main functions of a simple LMS are to manage acquisitions, enable the recording of a library’s holdings through a catalogue, manage movement of the collection through a circulation system, and generate management reports based on these three previous operations.32 Given the range of information available about the AML up until 1883—an extensive catalogue of monographic and periodical records, detailed acquisition information and a few examples of usage—the capturing of this information in one database offers the potential for more sophisticated manipulation of the data than would otherwise be possible. It also offers the opportunity to link information rarely recorded or retained on the modern LMS, such as a book’s provenance, deaccession information, location under various classification systems, or the titles held in the library that have been cited in the publications of library users.

Creating an electronic database that links cataloguing and administrative library functions is a convenient way of manipulating nineteenth-century library data, but one needs to be wary of distorting original information by the methodology chosen. Whenever interpreting results from this process, it is essential that the original ‘library systems’ used in the AML are kept in mind, including factors such as the role of the Museum Secretary/Librarian, the function of the Board of Trustees and the Book Sub-Committee, the relationship between the Museum and the various

sources through which books were accessed, as well as other administrative and relationship functions.

In order to create a dataset of sufficient richness, the following procedures were undertaken:

1) Creation of a database on Microsoft Access 2002 software—this involved analysis of the possible sources of available information and the creation of appropriate fields. In all, 38 fields were created (See Figure 29).

2) 1883 catalogue data entry—all records in each subject division of the 1883 catalogue were entered into the database.

3) Library register data entry—the 1883 records were then cross-matched against the first 1,000 titles listed in the first volume of the library register. Accession numbers, changed call numbers, deaccession information, any purchase information and additional notes of interest were added to the Access database.

4) Identification of duplicate records—duplicate listings of records were marked so they could be filtered from some of the searches.

5) Ensuring consistency of records across all fields—this included translating Latin publication locations to identify country of origin and identifying the publication language. Title formats were also identified and noted on the database, such as monograph, monographic series, monographs in parts, periodical or pamphlet/reprint.

6) Identifying accession dates of title purchases and donations—listings of titles in the annual reports from 1858 until 1884 were matched against the Access database and accession dates added to the database records. Similar information located in book invoices and correspondence held by the Australian Museum Archives was also added.

7) Adding information from physical evidence of listed titles—most of the titles were physically identified at the AMRL and previous ownership noted from inscriptions and binding. Accession information was also found in inscriptions and acquisition dates confirmed by the use of library stamps.
8) Adding evidence of circulation and reference use—though minimal, any requests to borrow books in the Board of Trustees Minutes and evidence of other usage in correspondence has been added to the database.

By entering all the records listed in the 1883 catalogue into the database we can be relatively satisfied that most of the titles that were held by the AML in that year have been included. However, a small number of titles were listed in the earliest part of the library register but do not appear in the printed catalogue and these have been added to the database. Annual Reports and Board of Trustee Minutes also reveal donations and other book acquisitions, made mainly in the 1850s, which were never accessioned by the library and which were later disposed of. As discussed in earlier chapters, parts of the library of Phillip Parker King and most of the library of Ludwig Leichhardt fall into this category. Because the bulk of these donations were not accessioned, and books such as Ludwig Leichhardt’s appear to have been little used by the Museum, they have not been included in the database of the ‘working’ library.

The Chronology of Growth

The database of AML accessions enables us, for the first time, to uncover the earliest content and pattern of growth of the library over a fifty-year period. Because of the relative flexibility of the database, we can choose to examine the library at a number of different chronological points. This section traces the development of the collection over four distinct phases in the Museum’s early history: the Museum’s administration by committee (1836–53); the Museum’s incorporation, the chairmanship of Governor Denison and the first book endowment (1854–63); Gerard Krefft’s appointment as Curator and Secretary and the period of his most productive output (1864–73); and the period during which the malaise following the dismissal of Gerard Krefft was replaced by a reinvigoration of library activity and the publication of the AML catalogue (1874–83). An analysis of the whole collection in 1883 will be provided later in this chapter, The AML Collection and its Contents, and focuses on the changing nature of the collection over the previous three decades.
<table>
<thead>
<tr>
<th>ID:</th>
<th>632</th>
<th>Book size:</th>
<th>4to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acc No (reg):</td>
<td>57</td>
<td>1883 Shelf No:</td>
<td>10 D</td>
</tr>
<tr>
<td>Acc Date:</td>
<td>1853</td>
<td>Reg Shelf No:</td>
<td>101B1</td>
</tr>
<tr>
<td>Acc Date (source):</td>
<td>BOTM</td>
<td>Current location:</td>
<td>RB D591.6/JAU/RARE BOOKS</td>
</tr>
<tr>
<td>Acc Date (Notes):</td>
<td>1 October 1853</td>
<td>AML Ident:</td>
<td>M</td>
</tr>
<tr>
<td>Donation or purchase:</td>
<td>Accident</td>
<td>Deaccessioned:</td>
<td></td>
</tr>
<tr>
<td>Acc Source:</td>
<td>James Murphy</td>
<td>When Deaccessioned:</td>
<td></td>
</tr>
<tr>
<td>Duplicate:</td>
<td></td>
<td>Where sent:</td>
<td></td>
</tr>
<tr>
<td>Catalogue:</td>
<td>1883</td>
<td>Book Cost:</td>
<td></td>
</tr>
<tr>
<td>Category (1883):</td>
<td>A8</td>
<td>Book Cost (Source):</td>
<td></td>
</tr>
<tr>
<td>Author:</td>
<td>Jauffret, L. F.</td>
<td>Reg Notes:</td>
<td></td>
</tr>
<tr>
<td>Title:</td>
<td>Zoographie des diverses régions tant de l'Ancien que du Nouveau Continent</td>
<td>1883 Catalogue Notes:</td>
<td></td>
</tr>
<tr>
<td>Journal Title:</td>
<td></td>
<td>Provenance:</td>
<td>Ludwig Leichhardt</td>
</tr>
<tr>
<td>Series:</td>
<td></td>
<td>Additional Notes:</td>
<td>&quot;Papers relating to the Leichhardt Collection&quot; ML A3928</td>
</tr>
<tr>
<td>Publisher:</td>
<td>De L'imprimerie de Crapelet</td>
<td>Circulation:</td>
<td></td>
</tr>
<tr>
<td>Place:</td>
<td>Paris</td>
<td>Circulation notes:</td>
<td></td>
</tr>
<tr>
<td>Publication Country:</td>
<td>France</td>
<td>Reference use:</td>
<td></td>
</tr>
<tr>
<td>Language:</td>
<td>French</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year:</td>
<td>1799</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illustrations:</td>
<td>Maps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The following description and analysis of the database results is summarised in six tables in Appendix I, showing a comparison between the accessions made during the four time periods identified.

**Periodisation of AML Accessions, 1836–1883**

**The Earliest Collection, 1836–1853**

Only eighteen titles (28 volumes) in the database have been identified as coming from this early period. Because of the smallness of the collection only a few general observations can be made about the method and source of acquisition. Of these early works, half came from the Ludwig Leichhardt library stashed away in the Museum basement in 1853 and were not accessioned by the library until many years later. Of the remaining nine titles, all were donated to the library by either the Colonial Secretary, visiting zoologists, locals with a Museum association or publications produced by the Museum itself. These books were published between 1833 and 1851 and their relatively recent publication may be explained by the fact that many were donated by their authors directly to the Museum or on behalf of authors to the Colonial Secretary of New South Wales. The lack of older texts also suggests that the Museum had not yet attempted to acquire historical works that would have been useful for the identification of museum specimens and that staff were still relying on private libraries.

Despite a board resolution in 1849 in which W.S. Macleay, George Bennett and the Reverend G.E. Turner were ‘appointed a Sub-committee to select and order such books from England as they may think best to form the nucleus of a Library of Natural History to be attached to the Museum’, there is no evidence that the £50 allocated was ever spent or that any book purchases were made at this time.

All the books were sourced in Sydney, whether brought to the museum by international travellers, local donors, associates of the museum, or Leichhardt’s personal possessions. If we discount Leichhardt’s books because of their

---

33 AMS1, Trustee Minutes, 24 March 1849.
inaccessibility at the time, publication countries were Australia (3 titles), India (3), Britain (2) and Germany (1) and languages represented were English (7), German (1) and Latin (1).

The earliest acquisition identified was probably the Museum’s first catalogue, compiled by George Bennett in 1837. Not long after, a copy of the *Catalogue of the Mammalia in the Museum of the Zoological Society of London* (1838) was delivered by John Gould to the Museum, on behalf of the Zoological Society, when he arrived in Sydney in 1839. Other donations, in 1851, included a copy from Lancelot Threlkeld of his newly published *Key to the Structure of the Aboriginal Language of the Natives of the Hunter River and Lake Macquarie* (1850). Also of interest is the donation in 1852 of a book by Dr J.G.H. Kinberg, zoological surgeon on the frigate *Eugenie*. This is the first of a number of gifts to the library from visiting international expeditions and reflects the significance of international contact and the importance of these visits for sharing information with local natural historians.

It was also in 1852 that *A Compendium of Osteology: Being a Systematic Treatise on the Bones of the Human Body* (1833) by Dr George Witt (Figure 30) was donated to the Museum and contains the earliest inscription made out specifically ‘To The Library of the Australian Museum’. Favourably reviewed in the medical press at the time of its publication, the subject matter—particularly the detailed

---

35 AMS7, A.19.38.1, Edward Charlesworth, honorary curator of the Zoological Society of London, to Phillip Parker King, member of the Committee of the Superintendence of the Museum, May 1838.
36 The title given by Kinberg was J.J. Berzelius, *Lehrbuch der Chemie*, Dresden, 1833–41.
38 ‘We deem it our duty to make so truly creditable and useful a work as much known as possible to our readers, and we are persuaded that both the junior and senior members of the profession will warmly approve the opinion we have given of its merits. It is an extremely valuable work to the student and teacher of anatomy.’ From ‘A Compendium of Osteology Being a Systematic
examination of the most effective technique of maceration—is consistent with a number of osteological titles acquired by the AML in the 1850s and 1860s and would have been considered a useful acquisition.

Unsigned by the donor, it is probable that the gift was made by Witt himself. A resident of Sydney at the time of the donation, Witt, a medical doctor, author and former Mayor of Bedford, had emigrated to Sydney in 1850 and set up a medical practice.\textsuperscript{39} Between 1852 and 1853, he served on the Museum’s Committee of Superintendence and was Museum Secretary for part of 1853.\textsuperscript{40} Making his fortune through banking and speculation, Witt returned to England in 1854 with his family and was financially secure enough to embark on the passion for which he is best remembered—the scholarly study of phallicism.\textsuperscript{41}


\textsuperscript{40} Strahan (1979), p. 162.

\textsuperscript{41} In the 1860s, Witt was at the centre of an international circle of collectors with an interest in phallic artefacts and was a leader in the development of phallicism as a scholarly field at this time. His collection of what was considered a scandalous legacy of antiquities and scrapbooks was donated to the British Museum in 1865 and secured in Cupboard 55 of the \textit{Department of Medieval and Later Antiquities}—from then on infamously known as the ‘Secretum’. David

---

\textit{Figure 30. Inscription of George Witt to the AML, 1852.}
The printed resources available in the museum during this earliest period of the AML’s history were sparse and the publications generated by the museum at this time do not reference any of the works known to be in the library. George Bennett’s *Catalogue of the Specimens of Natural History* (1837) has been discussed in detail in Chapter One and relied only on works held in private libraries. Similarly, the Museum’s first monograph, *Description of the Skeleton of a New Sperm Whale, Lately Set Up in the Australian Museum* (1851), credited to W.S. Wall but written by W.S. Macleay, does not rely on any of the titles available in the AML at this time and most likely reflects the quality of the collection in Macleay’s library at Elizabeth Bay House.42

The small number of books identified as coming from this period, the lack of purchases, and the passivity with which donations appear to have been accepted suggests an accidental book collection rather than a ‘library’ in these early years.

**A Library is Founded, 1854–1863**

The incorporation of the museum in 1853 may have offered greater independence to its executive, but the agenda for much of this period was dominated by its chairman, Governor Denison. There was a succession of milestones during this time, such as the opening of the William Street building, the introduction of public lectures, increased efforts in specimen cataloguing and exchanges and the acquisition of, and accommodation for, a foundation library collection. Despite these achievements, it was also a period when there were divisions between administrative staff members, a rapid turnover of senior staff and a lack of procedural clarity for the officers expected to manage the Museum and its collections.43

42 The main sources used by Macleay were George Cuvier’s *Recherches sur les Ossemens Fossiles de Quadrupèdes* (4th ed., 1836), Thomas Beale’s *The Natural History of the Sperm Whale* (1839), and possibly some volumes of Conrad Gesner’s *Historia Animalium* (1558).

43 Strahan (1979), pp. 22-25
This decade represented a burst of book-acquiring activity both in the form of donations and purchases; it represented the most significant antiquarian acquisitions and, consequently, a large number of the titles acquired were in Latin. It was also during this period that the AML acquired the most European publications. Between 1854 and 1863, the Library accessioned 490 titles, consisting of 1290 volumes (47% of volumes accessioned up until 1883). These titles represent 41% of all titles listed in the 1883 catalogue and are the highest number acquired in any of the periods examined. This decade of the library’s history has a number of qualities differentiating it from the other four decades recorded in the database. Despite a high number of endowment purchases, this decade records the most donations (65% of all known donations in the database), it has the highest number of British publications (53% of all British publications in the database), the most French (50%) and the most publications in Latin (79%). Of all the books in the database published before 1800, 62 titles (93%) were acquired between 1854 and 1863. While these early titles represent only 13% of the books acquired during this decade, 372 titles were published before 1854 and constitute over two-thirds (69%) of all books in the database published prior to this date.

To understand what was happening during this period, we need to recognise that this data is describing the simultaneous acquisition of multiple libraries from different sources in what appears an opportunistic rather than highly coordinated approach. The first major acquisition was the gift of parts of Phillip Parker King’s library in 1854 and 1856; the second was the result of a campaign driven by William Denison in the mid to late 1850s to encourage British government institutions to donate scientific literature to the colony; the third was Denison’s purchase of the William Swainson library from his widow in 1858; and the fourth was the purchase of hand-picked texts, which were purchased with the 1858 book endowment and accessioned between 1860 and 1861. In order to explore more closely what was intended by these acquisitions, I will divide the acquisitions during this period into three phases: pre-endowment (1854–59), endowment (1860–61) and post-endowment (1862–63).
Pre-endowment (1854–1859)

The 1883 catalogue listed 193 titles that were acquired following the Museum’s incorporation in 1853 and before the purchases from the endowment began to arrive in 1860. These books represent almost all (91%) of the titles acquired before 1859 and listed in the 1883 catalogue. Of these, 106 titles were donated and constitute 45% of donations recorded over the database’s five decades (see Table 8 for a comparison of the key donations and purchases, 1854–59). The largest donation consisted of approximately 300 volumes from the library of Phillip Parker King, although only one third of the collection was kept by the museum and subsequently catalogued. The size of King’s first gift of 80 volumes in 1854 no doubt made an impact on the Museum’s very small book collection, particularly as it included titles such as Cuvier’s *Règne Animal*, Linnaeus’ *Systema Naturae*, a French dictionary of natural history in 40 volumes and 25 volumes of the *Encyclopédie Méthodique*. The acceptance, however, of the astronomical and nautical content of the next gift of a little under 200 volumes, in 1856, seems to have been less useful, with a number of these volumes being transferred to the Colonial Astronomer in late 1860 in what appears an early attempt to rearrange New South Wales government book assets according to the subject specialties of its institutions.  

Despite the King donations, the Museum still lacked useful reference texts and we have seen in Chapter Two that Denison’s attempt to improve access to scientific literature in New South Wales at this time, through his approaches to the Colonial Office in London, was to bear some fruit. While many of the publications supplied by the Museum for Practical Geology in October 1857 were likely to have been of limited use to the AM, the delivery of zoological works from the British Museum

44 AMS1, Trustee Minutes, 1 November 1860: ‘The Secretary was directed to hand over all the Astronomical Works in the Library to the Rev Mr Scott Colonial Astronomer’. See Appendix D for the list of P.P. King’s astronomical works donated in 1856.

Table 8. Key Library Accessions Acquired 1854–59 and Catalogued in 1883

<table>
<thead>
<tr>
<th>Origin</th>
<th>Titles</th>
<th>% of all Titles</th>
<th>Vols.</th>
<th>% of all Volumes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Donations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1854/56</td>
<td>P.P. King</td>
<td>9</td>
<td>5%</td>
<td>88</td>
</tr>
<tr>
<td>1857</td>
<td>British Museum</td>
<td>58</td>
<td>30%</td>
<td>66</td>
</tr>
<tr>
<td>1857–59</td>
<td>Mus. Prac. Geol.</td>
<td>16</td>
<td>8%</td>
<td>19</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>83</td>
<td>43%</td>
<td>173</td>
</tr>
<tr>
<td><strong>Purchases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1855–58</td>
<td>Via Museum staff</td>
<td>12</td>
<td>6%</td>
<td>12</td>
</tr>
<tr>
<td>1858</td>
<td>Mrs William Swainson#</td>
<td>61</td>
<td>32%</td>
<td>152</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>73</td>
<td>39%</td>
<td>164</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>156</td>
<td>81%</td>
<td>337</td>
</tr>
<tr>
<td><strong>All Acquisitions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>193</td>
<td>100%</td>
<td>405</td>
</tr>
</tbody>
</table>

# Like the original King donation, of which two-thirds was not kept, the Swainson purchase is under-represented in this table. It does not include titles not listed in the 1883 catalogue or the unidentified books that constituted the original 227 volumes purchased in 1858.

in 1858 was of immediate importance. These recent catalogues, published between 1844 and 1857, offered detailed listings of specimens held by the British Museum in areas such as fish, reptiles, birds, marine animals and insects, and were used by AM staff as exemplars for the preparation of local catalogues. Many of the authors of these catalogues were leading contributors to zoology at the time and included: John Edward Gray, George Robert Gray, Francis Walker, Gérard Paul Deshayes, Thomas Vernon Wollaston and James Francis Stephens. Richard Owen had articulated the importance of these kinds of catalogues some twenty years earlier when he stated before a parliamentary committee that ‘I consider that in a national collection of natural history it is quite essential; that such a catalogue constitutes, in fact, the soul of the collection’.46 The British Museum’s decision to send a copy of

---

46 Great Britain, House of Commons, ‘Report from the Select Committee on the Condition, Management and Affairs of the British Museum,’ 1836 (440) X1, p.45.
all its zoological catalogues to Sydney was not, in fact, unique as the Board instructed that a set should also be sent to the Museum at the University of Melbourne at the same time. The disadvantage of the British Museum catalogues in a place like Australia was that not only was there no hope of physically viewing the actual specimens listed, but most of these catalogues were not illustrated. Initially, the catalogues were probably of more use as aspirational objects, examples of what could be achieved until more specimens had been collected by the AM, staff with better classificatory knowledge had been appointed and additional scientific literature had been acquired.

This need for practical texts had been demonstrated by the first, if modest, purchases made by the AML only months before the British Museum catalogues arrived. Sourced from two local Sydney booksellers, the Museum purchased a new edition of William Phillips’ *An Elementary Introduction to Mineralogy* (1852) from William Piddington and eight titles bought by George Bennett for less than £5 from John Cooke. While two books on shells undoubtedly suited Governor Denison’s interests, *Birds of Jamaica* (1847) by Philip Gosse seems a peculiar choice for an Australian institution with so few books. Like the *Introduction to Mineralogy*, the English translation of Henri Milne Edwards’ *Manual of Zoology* (1856) was an instructive text that would have been useful for less experienced museum employees. The inclusion of William Broderip’s populist *Zoological Recreations* (1847) may not only have reflected respect for a founding member of the Zoological Society of London, as well as one of Richard Owen’s closest

---

47 ‘Ordered, That a copy of the Zoological Catalogues of the Museum Collection be presented to the University of Melbourne in Australia, and another copy to the Australian Museum at Sydney.’ British Museum Trustees Minutes, 12 December 1857, p.C9302.

48 AMS7, Letters Received, 1853–1883, F:11, Receipt for payment from Sydney Museum to William R. Piddington, 6 June 1857.

49 The eight titles listed on Cooke’s list for inspection were *Manual of Zoology* by Henri-Milne Edwards, *Aquarium* by Philip Gosse, *Conchologist’s Nomenclator* (Conchologist’s Text-book by W. Macgillivray(?)), *British Zoophytes* by George Johnston, *Birds of Jamaica* by Phillip Gosse, *Brown’s British Shells*, *British Reptiles* by Thomas Bell and *British Star Fishes* by E. Forbes. AM Archives: Series 7, Letters Received, 1853–1883, F:11, John Cooke receipt, 28 February 1857. Gosse’s *Aquarium* is not listed in the 1883 catalogue and appears to have been replaced by W.J. Broderip’s *Zoological Recreations* which is included in Bennett’s list submitted to the Board: AMS1, Trustee Minutes, 7 March 1857.
confidants, but was also a book to which Bennett’s *Gatherings of a Naturalist* (1860) would be later favourably compared. Not long after these purchases, Denison recommended that the AM spend £1.10.0 on a copy of Gideon Mantell’s *Pictorial Atlas of Fossil Remains* (1850). This catalogue of fossils contained illustrations that had been produced up to 45 years earlier, but had been updated with the latest scientific names for these early fossil discoveries. Mantell’s newly commissioned frontispiece depicted the fossil foot bones of the recently discovered Moa in New Zealand and, along with its description, no doubt added to the attraction for the AM and was duly purchased. The subject matter also reflected Denison’s own particular interest in fossils, of which he had a large collection, and predates by a year his request to Roderick Murchison at the Museum of Practical Geology for a comparative set of fossils for study in Australia.

The Board’s decision to purchase the William Swainson collection of early natural history works, after viewing them in February 1858, had probably been decided by Denison as early as July 1857 (see Chapter Three for an analysis of the Swainson collection). By this time he had seen the list of titles, conferred with W.S. Macleay on the matter and would have seen how these books complemented Rear-Admiral King’s early natural history works stored at the AML. Despite the small handful of more recently published texts acquired by the museum, Denison and his Trustees were no doubt conscious of the absence of new scientific works in their library. Only four days after the Board was informed of the offer of Swainson’s library, a

---

52 AMS1, Trustee Minutes, 1 August 1857.
53 The plates had been first produced by James Parkinson for his publication, *Organic Remains of a Former World* (1804–1811), and by Edmund Artis for *Antediluvian Phytology* (1825).
54 ‘I wish you could put me in the way of a good collection of the characteristic fossils of the various English strata. We are sadly in want of something of the kind for the purposes of comparison ... and I am anxious to give to those who are inclined to take up the study the means of making comparisons for themselves between the Australian fossils, and those of other countries.’ William Denison to Roderick Murchison, Sydney, 4 September 1858, William Denison, *The Varieties of Vice-Regal Life*, London: Longmans, Green and Co., 1870, vol.1, p. 444.
letter was sent by the AM, on 5 August 1857, to the Secretary of the British Library requesting a donation of the Museum’s zoological publications.55

The Board’s request from the government, in mid 1858, for £500 to purchase scientific works for the library can now be contextualised by the database, which provides a good indication of the type of book collection held at the Museum prior to the arrival of the endowment material in early 1860. The key features of the 193 titles acquired between 1854 and 1859 were that:

- the oldest work was published in 1554 and the newest, 1859;
- while 20% of the titles had been published prior to 1800, the majority (55%) had been published within the previous fifteen years;
- publications in Latin made up 11% of the titles and were at their highest during this period, while French was also strongly represented (12%);
- monographs published in parts (20%) are most highly represented at this time and reflect the age of some of the material acquired;
- in terms of the subject areas collected, two-thirds (67%) of the works were zoological, where insects etc (28% of all titles) dominated but where there were also strong representations of mollusca (10%) and aves (8%). These were followed at a lower level by reptilia (4%), pisces (4%) and echinodermata (4%). Geological (12%) and botanical works (7%) were also well represented in the collection at this time.

The book collection at the Museum prior to the endowment purchases may have been small, but it was not inconsequential. With little more than £100 having been spent on the collection up to this point, the library was strong on recently published zoological catalogues and balanced by earlier taxonomic works still considered essential for the classification of specimens. There were, however, major gaps in the collection and these consisted of not only missing monographs by important figures working in zoology and geology, but also illustrative material to support classificatory activity at the Museum, key works about Australian flora

55 British Museum Central Archive, Original Papers, letter 7936, George F. Angas to the Secretary of the British Museum, Natural History Department, 5 August 1857.
and fauna published up until this time, as well as the latest metropolitan scientific periodicals.

**Endowment (1860–1861)**

Of the 258 titles accessioned between 1860 and 1861, 107 were purchased and 26 donated,\(^56\) while 124 titles have no known method of acquisition but were most likely part of the purchase made with the New South Wales government endowment of £500 granted in late 1858.\(^57\) Trustees George Bennett and George Macleay, along with Professor Richard Owen, in London, were named on a letter of credit for the purchase of scientific works for the AML, and many of the works purchased during this time appear to have been selected by Bennett and Macleay between 1859 and 1860 while on separate visits to England. Although some of the new acquisitions sourced in Britain were listed in the AM annual reports as having been financed by the endowment, many were not and there are no surviving financial records relating to these purchases. There is little doubt that many of the titles without a known acquisition method make up these missing items. Most (82\%) of the titles known to have been purchased with the endowment were sourced in Britain, while the remaining 18\% of documented purchases were made from F.F. Baillière in Melbourne.

In September 1858, George Bennett wrote to John Gould informing him that £500 had been placed on the government estimates for works on natural history for the museum library.\(^58\) He asked Gould to send him a list of his publications at the lowest price available and enquired about the possibility of Gould also supplying other second-hand titles on natural history. In 1860, the Museum paid £47 to

---

\(^56\) An additional title included in this period appears to have belonged to Gerard Krefft and is listed in the 1883 catalogue after having been ‘accidentally’ accessioned following his departure.

\(^57\) AMA: Series 7, Letters Received 1853–1883; F10, item 7, 10 March 1859, Letter of credit for £500 for the purchase of scientific works.

Gould for ten parts of his *Mammals of Australia* (1845–59) and the latest issues of a number of London scientific society journals.\(^{59}\)

While I have not located a similar request from Bennett or the Museum to Richard Owen, his name not only appeared on the letter of credit but two crates of books ‘purchased by Professor Owen for the Museum library’ arrived in Sydney in late 1861.\(^{60}\) In all, 28 titles were delivered and eighteen of these were listed in the 1883 catalogue under ‘Class A – Zoology & Comparative Anatomy,’ half of which were classified as ‘A9 Comparative Anatomy and Physiology’ and reflect Owen’s own expertise in this area. Of the five geological titles (Class C), Owen had included works of contemporary leading authors such as Roderick Murchison’s *Siluria: The History of the oldest known Rocks containing Organic Remains* (1854) and Charles Lyell’s *Principles of Geology* (1847). It is a selection that suggests Owen had chosen titles useful to an establishing library, and this is confirmed by the inclusion of the latest edition of the *Encyclopaedia Britannica* (1853–60), which we have seen was used by Gerard Krefft for his work on Australian fossils in the mid 1860s. Owen may also have hoped to influence the young institution through the major entries he had written for the *Encyclopaedia*. Of less immediate use to Krefft were volumes Owen had sent relating to microscopy. As founding president of The Microscopical Society of London, Owen had been a keen advocate of the microscope and his sending of new histological works such as Louis Mandl’s *Anatomie Microscopique* (1838–57) and Albert Kölliker’s *Manual of Human Microscopic Anatomy* (1860) is no surprise. Governor Denison was also interested in this area and in 1859 suggested to members of the Philosophical Society of New South Wales that a Microscopical Committee be formed.\(^{61}\) Yet the Museum’s failure to update its

---

\(^{59}\) AMA: John Gould Invoice to the Trustees of the Australian Museum, 16 January 1860, Series 7, F:10 - F:10.80, Book Invoices and Book purchase Correspondence [1859–1880]. It is also evident from this invoice that Gould had initially charged £88 for a full set of *Birds of Australia*, which was then withdrawn.

\(^{60}\) AMS1, Trustee Minutes, 5 December 1861. While the books were received in 1861, they are not publicly acknowledged until their appearance in the 1865 Annual Report’s ‘list of books purchased for the Library of the Australian Museum’. This suggests a note of caution when making assumptions about the reliability of the reporting in the Museum’s annual reports.

\(^{61}\) Branagan (1972), p. 131.
technology at the time—a 40-year-old microscope formerly belonging to Ludwig Leichhardt—highlights the lack of a strategic approach with which the new literature could be put to its best use. This example also reminds us of the lack of skilled staff available at the time the library was formed and of the fact that, even a decade later, Gerard Krefft’s inexperience on the microscope was apparent in his work on tapeworms.

The majority of titles (68%) acquired during this period were published in Britain. Other locations represented are France (10%), USA (7%), Germany (6%), Other Europe (7%) and Australia (1%). The language of publication closely matches that of country of publication with 76% of the titles in English, followed by French (13%), German (5%) and Latin (4%). The proportion of Latin texts is lower than in the acquisitions made just prior to the granting of the endowment and reflects the smaller number of purchases of pre-nineteenth-century texts made between 1860 and 1861.

‘Zoological or Comparative Anatomy’ titles continued to dominate the subject choice during the endowment period (66% of all titles) and ‘Aves’ (10%), ‘General Zoology’ (9%), ‘Mollusca’ (8%) were strong. ‘Insecta’ (17%) was pared back slightly by an increase in material on ‘Mammalia’ and ‘Comparative Anatomy’ (both 7%). ‘Geology’ (12%) remained at the same level as the pre-endowment period but with an increase in palaeontological material to almost equal that of geology and mineralogy combined, while ‘Voyages’ and ‘General Science’ were more highly represented (both 8%) than in the pre-endowment period. The investment in ‘Voyages’ material included the purchase of first fleet and early explorer accounts of Australia, its natural history and its indigenous people and appears to represent retrospective ‘gap-filling’ of locally related material.62

62 These works included: Arthur Phillip, Voyage of Governor Phillip to Botany Bay (1790); John White, Journal of a Voyage to New South Wales (1790); Phillip Parker King, Narrative of a Survey of the Intertropical and Western Coasts of Australia (1827); J.L. Stokes, Discoveries in Australia (1846); R.H. Major, Discovery of Australia by the Portuguese in 1601 (1861); and the Australian expeditions of Mitchell, Oxley, Sturt, Grey and Eyre.
The high proportion of second-hand purchases at this time resulted in the acquisition of titles with some of the most interesting provenances collected up to 1883. A number of the books purchased with the endowment have the marks of previous owners and provide clues to the circumstances of their acquisition. Five titles listed in the 1861 annual report were from the library of physician and naturalist, Thomas Horsfield and were probably acquired by George Bennett. Born in Pennsylvania, Horsfield settled in London, in 1819, having spent the previous seventeen years exploring and documenting natural history in Java. He was employed soon after as Curator of the East India Company Museum and worked there for the rest of his life while actively involved in the publishing of articles and monographs relating to his interest in South East Asia. There is no evidence of a direct relationship between Horsfield and the Australian Museum, but there were a number of associations between Horsfield and his work and AM staff and trustees. In the mid 1820s, Alexander and W.S. Macleay had advised Horsfield and Vigors, fellow Linnean Society members, on their paper on Australian Birds, and this was the same paper from which George Bennett had derived his bird descriptions for the AM’s first catalogue in the following decade. Quinarians W.S. Macleay and William Swainson had both worked with Horsfield on monographs and this relationship may well have motivated the purchase of the Horsfield copy of W.S. Macleay’s *Horae Entomologicae* (1819) for the Museum with


64 N.A. Vigors and Thomas Horsfield (1827), pp. 170–331.

the endowment money. Both George Bennett and Horsfield had referenced each other's work when discussing the South East Asian gibbon, Siamang, and Bennett was not only in London at the time of Horsfield's death, but on 11 June 1860, he was presented with Horsfield's last publications by co-author and East India Museum employee, Frederic Moore. It may have been through this contact that Bennett was made aware of the sale of Horsfield’s library. Following Horsfield’s death in 1859, his library had been removed from the Indian Museum by his executors and distributed among individuals such as Frederic Moore and a number of booksellers. Bernard Quaritch listed Horsfield’s volumes in *A Catalogue of Books* published in 1860 and this catalogue is the likely source for a number of the purchases made by Bennett for the AML and his own library at the time. One of these was Horsfield’s copy of an uncommon work, François Valentyn’s *Oud en Nieuw Oost-Indiëen* (The East Indies Past and Present) (1724–26) and reflects Bennett’s interest in the natural history of this geographical region close to

66 The existence of the Horsfield copy at the AML was used by W.J. Macleay, in 1863, to justify an exchange of the duplicate Swainson copy of the *Horae* for another title from his own library. AMS1, Trustee Minutes, 7 May 1863.


68 The two Thomas Horsfield titles presented to Bennett were: *A Catalogue of the Lepidopterous Insects in the Museum of the Hon. East-India Company*, London: Wm. H. Allen, 1857–59 and *A Catalogue of the Birds in the Museum of the Hon. East-India Company*, London: Wm. H. Allen, 1856–58. Both copies were later acquired by David Scott Mitchell and are now held by the Mitchell Library. Interestingly, these texts were kept by Bennett for his personal library and duplicates were not obtained for the AML, despite content relating to South East Asia.

69 The AMRL holds William Jardine, *Contributions to Ornithology*, Edinburgh: W. H. Lizards, 1848–1852, a title from Horsfield’s library which was acquired after the publication of the AML’s 1883 catalogue and had been presented to Frederic Moore by ‘the executors of the late Dr. Horsfield’.

70 Bernard Quaritch, *A Catalogue of Books, in all Classes of Literature, Many of them Rare, Valuable and Curious*, London: Bernard Quaritch, 1860. The sum of £53 was set aside for the India Office to buy back from booksellers, including Quaritch, some of Horsfield’s library, but most went into public and private collections. See the memoir by John Bastin in *Thomas Horsfield, Zoological Researches in Java and the Neighbouring Islands*, Singapore: Oxford University Press, 1990, p. 86.

71 François Valentyn, *Oud en Nieuw Oost-Indiëen, Vervattendeeen Naaukeurige en Uitvoerige Verhandelinge van Nederlands Mogentheyd in die Gewesten*, Dordrecht; Te Amsterdam: By Joannes van Braam; Gerard onder de Linden, 1724–26, AMRL: RB F168A J5 [Rare Folio], is listed as item no. 3884 in Quaritch’s 1860 catalogue.
The early publication date of this book also suggests that Bennett was motivated to purchase it for reasons other than subject interest. Surviving titles from Bennett’s library, many of which were not listed in bookseller Dymock’s sale catalogue of 1895, reveal an interest in antiquarian book collecting that informed Bennett’s choice of titles for the AML. A number of these works seem to reflect an historical rather than a classificatory use and included works by Aldrovandi (published 1610–1647), Goedhart (1662–70), Valentyn (1724–26), Swammerdam (1737), Rossel (1758), and Lyonet (1762).

It may have been Bennett’s sense of history too, in addition to Denison’s personal hobby, that inspired the purchase of George Cuvier’s own copy of his Mémoires pour Servir à l’Histoire et à l’Anatomie des Mollusques (1817), the volume stamped with the mark of Cuvier’s library. Other records of ownership of interest from this period include Irish geologist William Henry Fitton, Arctic explorer John Ross, and English naturalist John MacGillivray.

It appears that of the 258 titles acquired between 1860 and 1861, almost 90% were purchased out of the endowment fund. The books chosen were tools primarily for classification and followed the direction set by the Museum’s

72 Bennett not only reported on his visit to South East Asia in his Wanderings, Bennett (1834), but was probably the purchaser of the Valentyn for the AML. The 1895 Dymocks sale catalogue of Bennett’s library reveals that he owned at least another two titles dedicated to South East Asia: Thomas Horsfield, Plantae Javanicae Rariores, London: W.H. Allen, 1838–52 and Georg Rumph, Herbarium Amboinense, Amstelledami: Apud Franciscum Changuion, Ioannem Catuffe, Hermannum Uytwerf, 1741–1750, and both titles were listed in the Quaritch 1860 catalogue. David Scott Mitchell also owned these titles and while there are no Bennett bookplates on the copies held in the Mitchell Library, a Dymock’s bookseller’s label on the Horsfield title, DSM/F581.9981/H, suggests this may well have been Bennett’s copy and annotations on the Rumph, DSM/F581.9, look similar to the hand of Thomas Horsfield. Horsfield’s personal copy of the Rumph was listed in Quaritch’s 1860 catalogue and may have been the copy purchased by Bennett.

73 Stephen Jay Gould briefly discusses an example of a stamped book from Cuvier’s library, along with an illustration, and notes that this copy had become the property of the library of the Musée d’Histoire Naturelle and was later sold off as a duplicate. See Stephen Jay Gould, The Structure of Evolutionary Theory, Cambridge, Mass.: Belknap Press of Harvard University Press, 2002, pp. 308–309. A copy of this title was listed in the Quaritch 1860 book catalogue, no. 4778, and while Cuvier’s ownership was not mentioned in the listing this may have been the purchase source.
acquisition of the King, Swainson and British Museum works. Krefft used these texts acquired for the library to construct the Museum’s Class Mammalia display and write the accompanying catalogue, which was published in 1864.\textsuperscript{74} The oldest work purchased during this period was published in 1610–1635,\textsuperscript{75} but considerably fewer of the accompanying works had been published prior to 1800 than in previous years (7\% compared to 20\% of works acquired between 1854–1859). On the other hand, only 34\% of the titles were less than fifteen years old—fewer new works than those acquired in the pre-endowment period (where 55\% of the titles were less than fifteen years old). It is clear that the endowment was being used to fill gaps between the older works acquired from Mary Swainson and Phillip Parker King and the newly published zoological catalogues being sent by the British Museum.

\textbf{Post-endowment (1862–1863)}

This period was marked by a reduction in activity following the endowment purchases. While the departure of Denison, death of Simon Pittard and the delay to formally appoint Gerard Krefft as curator until 1864 may have contributed to the reduction of acquisitions in the years immediately following the endowment, the size and management demands of the new collection, the amount previously spent on purchases, and political infighting appear to have placed a brake on major expansion until well into the late 1870s.

In the two years following the endowment only 39 titles were acquired by the AML. Of these, one third (31\%) consisted of purchases and some, such as the almost £20 worth of books acquired from F.F. Baillière in Melbourne, appear to represent the

\textsuperscript{74} In the introduction to his first catalogue, Krefft notes: ‘Cuviers system with some modification has been adhered to in the arrangement of the Catalogue, the synonyms &c., being compiled from \textit{Dr. Gray’s Catalogues of Mammalia in the British Museum} [acquired 1858–63], from \textit{Gould’s Mammals of Australia} [1860], and \textit{Waterhouse’s History of Mammalia} [c.1860]. Gerard Krefft, \textit{Catalogue of Mammalia in the Collection of the Australian Museum}, Sydney, Printed by order of the Trustees, 1864, [6].

\textsuperscript{75} Ulisse Aldrovandi, \textit{Ornithologiae, Hoc est de Avibus Historiae}, Francofurti: Typis Wolfgangi Richteri, impensis Ioannis Bassaei, 1610–1635.
Nevertheless, a small number of requisitions for books, mainly on zoology, were submitted by Krefft to the Board and were usually approved, while all other book requests and purchases were moved or seconded by George Bennett. It was during 1862 that Bennett spent four months arguing for the purchase of Gould's *Birds of Australia* for £88 and, though he ultimately succeeded, it was another two years before the books were delivered and paid for. Bennett proved an excellent sales representative for Gould post-endowment as he also convinced the Board to subscribe to *Birds of Great Britain* in 1863 at a cost of £6 per annum.

Most of the acquisitions during this period were donations, many coming from the Trustees of the British Museum, as well as a few volumes from the library of former Trustee, John Vaughan Thompson. While £181 was allocated to library expenditure over these two years, most telling was the appearance of a new line item in the form of a book-binding budget which accounted for 52% of the funding provided for the library. There were 1290 volumes to be managed in the AML by this time and over 800 of these had arrived between 1860 and 1861. The post-endowment period was focussed on taking stock and getting the collection bound and into order and, though there is evidence of Gerard Krefft making use of the resources available to him, he would spend the next decade as Curator doing little more than tweaking the collection in accordance with his own scientific interests.

---

76 Of 19 titles offered to the Museum in December 1861 by Baillière at a value of £99.12.6, only two titles were purchased: H. Milne-Edwards, *Histoire Naturelle des Crustacés* (1834–40) and *Reports and Surveys for a Railroad from the Mississippi to the Pacific Ocean* (1854). AMS7, F:10, F.F. Baillière invoice, 19 December 1861.

77 AMS1, Trustee Minutes, 2 July 1863.

78 Six titles were donated to the AM 15 years after Thompson's death, in 1862, by his son-in-law, Thomas George Wilson of Lake Innes. See Appendix E for titles.

A Period of Consolidation, 1864–1873

Krefft continued to manage the library as Curator/Secretary throughout this period. Following substantial growth over the previous ten years, this decade was marked by steady but restrained spending and new titles were down to only 30% of the level of acquisitions made in 1854–63.

Between 1864 and 1873, only 147 titles (12% of the 1883 catalogue) were accessioned. In all, these titles consisted of 388 volumes. As only 37% of the titles accessioned in 1864–73 are identifiable as a purchase or donation, we cannot ascribe any worthwhile meaning to the method of accessing books during this time. However, for those titles for which we can identify an accession method, significant purchases for this period included William C. Hewitson Illustrations of New Species of Exotic Butterflies (1862–67); A.W. Scott’s Australian Lepidoptera and their Transformations (1864); Charles Darwin’s Variation of Animals and Plants under Domestication (1868); Gerard Krefft’s Snakes of Australia (1869); and Handbook to the Birds of Australia (1865), purchased directly from John Gould.80

The most notable donations were Transactions of the Entomological Society of New South Wales (1863); publications from the Geological Survey of India (1863–64); Ferdinand von Hochstetter’s New Zealand, its Physical Geography, Geology, and Natural History (1867) donated by the New Zealand government; British Museum catalogues, and Flora Australiensis: a Description of the Plants of the Australian Territory by George Bentham, assisted by Ferdinand Mueller (1863–67). Richard Owen also donated a number of titles, the first being his Memoir on the Gorilla (1865), with a dedication 'For the library of the Colonial Museum, Sydney'. His later donations related to Palaeontology and, as we have seen in Chapter Four, were the impetus for a spirited attack by Krefft on Owen through the local popular press and scientific periodicals.

80 AMA: Invoice from John Gould to the Trustees of the Australian Museum, 21 December 1865, Series 7, F.11, Book invoices and book purchase correspondence [1857–1884]. The Handbook had been purchased with a number of parts from Birds of Great Britain but appears to have gone missing as it was not listed in the 1883 catalogue or thereafter.
While a number of palaeontological works were acquired during this decade, zoology continued to be the major subject choice (56%) after redistribution. Proportionally, ‘A1 Mammalia’ was at its highest in this period (9%) and was bolstered by a number of Krefft’s own publications, such as Catalogue of Mammalia in the Collection of the Australian Museum (1864); Vertebrata of the Lower Murray and Darling (1865), and Mammals of Australia and their Classification (1873). ‘A6 Insects’ also continued to be an area strongly represented (17%).

While half (52%) of the titles accessioned during this period were published in Britain, 36 Australian publications (24% of all titles) were also acquired. This small number of works marks the beginning of a growing presence of locally published material in the AML, with twenty papers or monographs by Australian Museum employees or trustees and ten of these written by Gerard Krefft alone. In addition to papers, catalogues and monographs on Australian flora and fauna, the acquisition of periodicals published by Australian scientific and philosophical societies in the 1860s grew and reflects the publishing endeavours of small yet determined scientific communities in Sydney, Melbourne and Adelaide.81

The works accessioned between 1864 and 1873 represented the most up-to-date publications of all the periods surveyed, with 76% of these titles having been published in the decade in which they were accessioned (compared to 24% in 1854–63 and 50% in 1874–83). Related to this was the decline in the number of texts in Latin, which had dropped from 6% in the previous decade to only 1% of titles acquired and set the trend for the remainder of the period covered by the database.

81 Transactions and Proceedings of the Royal Society of Victoria (1865–88); Transactions of the Philosophical Society of New South Wales (1862–65); Transactions of the Entomological Society of New South Wales (1863–73); Papers Read Before the Philosophical Society and the Chamber of Manufactures, Adelaide (1873).
While this favouring of new works suggests a working library, one in which the collection focus has moved beyond building a foundation collection and is more focussed on current literature, it may also reflect the research needs of curator Krefft and the focus of museum activity at this time. While monographs make up half (49%) of all accessions, the proportion of serial titles (16%) is at its highest for all periods studied and marks the beginning of a trend in the library’s growth of serials, pamphlets and reprints and reflects the increasing numbers of journals being produced to report burgeoning scientific activity around the world.  

_Further Expansion and More Local Publications, 1874–1883_

This final decade analysed by the database commenced with the dismissal of Gerard Krefft and a virtual freeze of museum activities immediately after his departure. Edward Pierson Ramsay was appointed Curator in 1874 and was to benefit from a major increase in the Museum’s budget from the late 1870s and the addition of an annual book endowment between 1879 and 1883. Driven by the increase in new acquisitions, the library was registered, catalogued and the print catalogue published in the early 1880s. This period marked a resurgence of accessions, with 466 new titles arriving and constituting 39% of all unique records in the 1883 catalogue, while the 963 volumes physically represent one third (35%) of the whole library in 1883. The 267 titles identified as purchases in this decade made up more than half (57%) of the titles acquired and was the highest proportion of recorded purchases of all periods examined. As with some of the earlier decades, the accession method is unknown for almost one third (30%) of the titles and these are likely to constitute

---

82 During this decade the AML not only continued subscribing to the few journals previously purchased as part of the endowment but established new runs of journals such as _The Ibis: A Magazine of General Ornithology_; _Transactions of the Entomological Society of London_; _The Philosophical Magazine and Journal of Science_; _Entomologische Zeitung_; and _The Athenaeum: A Journal of Literature, Science, and the Fine Arts_. It was during this period that the bibliographical finding aid, _Record of Zoological Literature_, was first subscribed to and followed Krefft’s order, in 1863, for a copy of _Bibliotheca Zoologica_.

books bought for the library. The highest level of purchasing took place between 1880 and 1883, when two-thirds of these titles were bought and, in part, was a reaction following the departure of Krefft to years of limited purchasing activity. With the country of purchase not known for more than half of these titles (51%), the 121 titles coming from Britain (45% of purchases in this decade) and the nine titles from Australia (3%) probably underestimate the extent of the representation of these two countries. Many of the British purchases were made from the London firm Trübner & Co., with considerable correspondence between the Museum and booksellers held in the Museum’s archive from this period.  

Like the previous decade, donations (13%) were considerably lower than the peak (31%) reached in 1854–63. Most significant were the 29 titles (50% of donations in this period) coming from Australia. A further 14% were sourced from New Zealand and together represented 64% of donations made during this period. A significant proportion of donations both from Australia and New Zealand were sourced from the government and included New South Wales institutions such as the Department of Mines, the Government Printer, the Colonial Secretary's Office, and the Public Library, as well as Victoria’s Office of Mines and the Chief Secretary’s Office. All donations from New Zealand, except one from Julius von Haast at the Canterbury Museum, were sent on behalf of the government by Dr James Hector at the Colonial Museum, in Wellington. Donations were received from individuals of note, including local scientists Rev. J. E. Tenison Woods; Baron Ferdinand Von Mueller; Austrian zoologist, Franz Steindachner; and French palaeontologist and entomologist, Paul Gervais.

The influence of British publications was at its lowest of all the periods examined, with the 180 titles making up 38% of titles accessioned. The difference was in part made up by the greater acquisition of 75 German titles (16%), nine of which were probably purchased in Krefft’s last year at the museum, while a further 35 (47% of German titles) were from the monographic series Systematisches Conchylien-

---

84 Much of this correspondence is in AMS7 F:11 - F:11.80, [Book invoices and book purchase correspondence], 1857–1884.
Cabinet. Relating to the increase in Australian donations was the rise in the representation of Australian publications (16% vs 11% in the database overall) and, when combined with New Zealand publications, local content was of even greater significance (21% vs 13% overall). The prominence of government-supplied material is complemented by publications from individuals in fledgling university science departments such as W.A. Haswell and Archibald Liversidge, both at the University of Sydney. It has already been mentioned that Haswell was Acting Director of the Museum at the time of the publication of the AML’s catalogue, but there is also evidence that as a Trustee at the Museum, Liversidge was active in selecting book material at this time. 85

The desire to acquire newly published material continued into this decade, with 233 titles (50%) published in the previous ten years and climbing to 68% of titles over the previous twenty years. In terms of preferred formats, monographs (34%) and monograph series (32%) continued to be important along with pamphlets/reprints (21%). New serial titles were also accessioned (12%) and confirmed a long-term commitment to a library at the Museum.

When considering the redistributed subject choice for material between 1874 and 1883, we can see that ‘Class A—Zoology & Comparative Anatomy’ dropped below half (47%) for the first time. Despite this fall, ‘A5 Mollusca’ grew to 17% of all accessions and marked the beginning of what has long been considered a significant rare book collection in the malacological research world. The largest shift in subject choice between this decade and 1864–73 was the increase in ‘Category C—Geology, Palaeontology, and Mineralogy’ (27%). Much of this material had been purchased, therefore was not an ‘accidental’ acquisition, and focused on geology and fossils. It is likely that this change reflects the interests and influence of Archibald Liversidge, Professor of Geology and Mineralogy at the University of Sydney at this time.

85 AMS7, F:11-F:11.80, [Book invoices and book purchase correspondence], 1857–1884, Trübner & Co., to the Australian Museum Trustees, 3 September 1880. On a list of prospective book purchases, Liversidge has marked all the geological works he feels should be purchased for the library.
The AML Collection and its Contexts

Perceptions about the size and quality of the Australian Museum Library collection varied among those few people who chose to comment in the years prior to the publication of the AML’s catalogue. *The Sydney Morning Herald* was consistent in its opinion, observing in 1860 that the Museum had a small but ‘first-class library’ and consisted of ‘carefully selected works of science, art, and industry’, but articulated a concern about the library’s accessibility. Twenty years later the newspaper described the AML as ‘a large and valuable collection of scientific works’ but continued to worry about the lack of public access. Ornithologist Sylvester Diggles had, in 1872, considered the library ‘valuable’ when he had the opportunity to examine titles he had only known by reputation while on a visit from less well-resourced Brisbane. Of those who actually worked at the AM, opinion was divided: Curator E.P. Ramsay described it as a ‘valuable library of useful scientific works’, while Gerard Krefft was less generous, in 1874, when he dismissed the library as consisting of ‘a few hundred books, one third of which are of no earthly use to the curator’.

The database has revealed that Krefft’s observation seems harsh given that there were 655 titles consisting of almost 2,000 volumes in the library when he made his criticism, yet we have also seen that Krefft’s research was disadvantaged at times by the patchiness of the collection. Krefft was feeling particularly hostile towards the Museum Board at the time he made his assessment of the library, but the refusal of some of Krefft’s book requests by the Trustees are well documented in

---

86 *SMH*, 22 August 1860, p. 5.
87 ‘Our Hidden Treasures of Knowledge’, *SMH*, 29 August 1860, p. 2.
89 S. Diggles, ‘A short account of the trip to Cape Sidmouth and back, in the Governor Blackhall.’ *Transactions of the Queensland Philosophical Society*, vol. 1, 1872, p. 2.
the museum’s Board Minutes and provide some justification for the curator’s irritation.\textsuperscript{92}

It is clear that each of these contemporary evaluations of the library varies and depends on the circumstances of the commentator’s interaction with the collection and his motivation for describing the library. In this section, the database findings enable us to drill down below these imprecise statements and not only to trace the development of the collection over a period of fifty years but also to consider the external contexts within which it was formed.

\textit{Key Aspects of the Development of the AML Collection up until 1883}

In all, 1191 separate titles were listed in the 1883 catalogue and consisted of 2741 volumes. Figure 31 reveals the fits and starts in the library’s growth between 1836 and 1883 and the hiatus, during the Krefft period (1864–73), which followed the first endowment investment. While it is clear that Krefft’s arrival coincided with the first major development of the book collection, the small number of library acquisitions during his period as Curator means the collection bears little of his influence save for some works on reptiles and titles by Ernst Haeckel. It comes as a surprise that Krefft, a revered nineteenth-century scientific figure in Australia, should leave such a small mark on his institution’s book collection. It was not until the next decade that significant reinvestment was made in the library when annual book endowments were introduced in 1879, during a period of budget growth and a focus on the library by E.P. Ramsay.

\textbf{Publication Sources}

The origins of the books acquired for the library were only partly documented. Twenty per cent of the overall collection was received in the form of donations, with the bulk of these titles arriving in the AML’s early years (1854–63: 31%; 1864–1873: 12%; 1874–1883: 13%). The number of donations declined as the AML became more independent and the reduced reliance on British institutional

\textsuperscript{92} The books which the Curator is much in want of are seldom or ever purchased and his account for books which are necessary is a heavy outlay to him’. ML A890, Gerard Krefft to Henry Parkes, ‘memorandum’, 2 March 1874, Parkes, Sir Henry–Correspondence, vol. 20, p. 417.
donations meant that later donations were more likely to be locally sourced and published in Australia. It is probable that the remaining 80% of the acquisitions in the catalogue were purchased for the AML, although more than a third of these (37%) are undocumented.

![Figure 31. Size of the collection at four points in time.](image)

Of the 734 titles known to have been purchased or donated, almost half were sourced from Britain (47%), followed by Australia (16%) and New Zealand (9%). This British dominance was mirrored by the number of books in the AML published in Britain (52%) and is illustrated in Figure 32. Non-British publications consisted of works from Germany/Austria (12%), Australia (11%), the United States (7%), France (6%), and New Zealand and India (each 2%). Publications from other countries make up the remainder (8%) and included the Netherlands, Italy, Belgium, Norway, Denmark, Sweden, Brazil, Japan and Czechoslovakia.
The dominance of British publications in the AML had begun to decline by the 1860s and fell from two-thirds (67%) of all titles held in the library in 1863, to only half (52%) in 1883. French publications similarly declined and were never as well represented as in those older works donated and purchased in the 1850s. These declines were offset by the growth of publications from Germany/Austria (mostly acquired in the decade after Krefft’s departure), Australia and the United States.

![Proportion of the collection published in five main countries at four points in time.](image)

**Figure 32.** Proportion of the collection published in five main countries at four points in time.

The rise in the representation of Australasian publications in the library from 2% in 1863 to 13% in 1883 is indicative of a broader intercolonial co-operation in terms of specimen exchanges and the donation of literature published by government institutions. In 1883, publications in English were most strongly

---

represented (75%) followed by German (10%), French (10%), Latin (3%), Italian (1%) and other languages (1%).

**Subject Distribution**

The Australian Museum Library catalogue reveals that zoological works made up more than half (56%) of the collection in 1883 (Table 9). ‘Class C—Geology, Palaeontology & Mineralogy’ is the next most strongly represented area of interest but is less than a fifth (18%) of all the works held. Botany is little represented (5%) and may reflect the subject divisions of NSW government libraries at the time, where the Royal Botanic Garden Library had been collecting in this area for over 30 years.

<table>
<thead>
<tr>
<th>Subject</th>
<th>No. of Titles</th>
<th>% of all Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Zoology</td>
<td>669</td>
<td>56%</td>
</tr>
<tr>
<td>B. Botany</td>
<td>60</td>
<td>5%</td>
</tr>
<tr>
<td>C. Geol. Etc</td>
<td>215</td>
<td>18%</td>
</tr>
<tr>
<td>D. Proc. Etc*</td>
<td>–</td>
<td>0%</td>
</tr>
<tr>
<td>E. Voyages</td>
<td>48</td>
<td>4%</td>
</tr>
<tr>
<td>F. Ency. Etc</td>
<td>33</td>
<td>3%</td>
</tr>
<tr>
<td>G. Gen. Sc.</td>
<td>110</td>
<td>9%</td>
</tr>
<tr>
<td>H. Misc.</td>
<td>56</td>
<td>5%</td>
</tr>
<tr>
<td>Unspecified*</td>
<td>–</td>
<td>0%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1191</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Class D Periodicals’ and titles with unspecified subject areas have been redistributed across the catalogue’s other subject areas.

Despite the strong representation of zoological works in 1883 overall, Figure 33 shows that the proportion of zoological titles added to the collection declined by one fifth over three decades (1854–63: 67% of all acquisitions were zoological; 1864–1873: 56%; 1874–1883: 47%). The British Museum catalogues and
Swainson titles provide the initial strong zoological presence in the library but an increased focus upon geological and palaeontological works in the collection (1854–63: 11% of all acquisitions in ‘Class C’; 1864–1873: 16%; 1874–1883: 27%) reflects the Museum’s interest not only in the gold discoveries of the 1850s onwards but also an interest in Australian fossil history. The later increase in these types of titles may also have been due to the influence of geologist and Museum Board member, Archibald Liversidge, who was asked to review suggested library purchases in 1880.

![Figure 33. Comparative distribution of acquisitions in three decades according to key subject area.](image)

While the steady growth in ‘Class C’ material reflected interest in earth and palaeontological sciences, there were also changes in the type of zoological material acquired. Krefft’s interest in Australian mammals appears to have been reflected in the higher proportion of mammal publications acquired between 1863–74. The increase of ‘Class A5’ (Mollusca etc) literature over the last decade of the study (2% in 1864–73 to 17% in 1874–83) (Figure 34) is caused primarily by
the acquisition of multiple volumes of *Systematisches Conchylien-Cabinet* (covering 1841–81) from Trübner & Co. in the early 1880s. This focus coincided with the appointment of John Brazier, in late 1879, to catalogue part of the Museum's shell collection.⁹⁴

There was, however, a considerable decline in the representation of ‘Class A6’ (Insecta etc) literature from the 1850s onwards (1854–63: 23% of all acquisitions were ‘Class A6’; 1864–1873: 17%; 1874–1883: 7%). This reduction in the proportion of entomological literature being acquired each decade appears to mirror the decline in the influence of the Macleay family at the Museum. The decade leading up to 1864 had included the Swainson and entomological endowment purchases prior to the death of W.S. Macleay, in 1865. William John Macleay represented the Macleay entomological interest on the Board in the next decade and had inherited William Sharp Macleay’s entomological specimens and part of his entomological book collection. William John had committed his energies

---

⁹⁴ Strahan (1979), p. 41.

324
to the Entomological Society of NSW in the 1860s and then the Linnean Society of NSW from 1874 and put considerable resources into purchasing literature for the Linnean Society library. Despite these entomological distractions, Macleay maintained an interest in entomological material acquired by the AML, including his request, in 1863, for the Swainson duplicate copy of *Horae Entomologicae* by W.S. Macleay. The largest geological book purchases during the period covered by the database were made in the years immediately following W.J. Macleay’s departure from the Board, in 1877, and were at the expense of the entomological collection.

The Australian Museum’s early interest in acquiring anthropological artefacts was demonstrated by George Bennett, in 1837, when he listed four pages of objects of the Aboriginal people of Australia and Torres Strait in the Museum’s first catalogue. Images of displays within the Museum galleries and at the Garden Palace Exhibition in the late 1870s confirm that this interest had continued. The AML collection, however, does not reflect this interest beyond some of the earliest observations made in publications written about Australia in the late eighteenth and early nineteenth centuries, the works of explorers and the occasional title such as Threlkeld’s *Key to the Structure of the Aboriginal Language of the Natives of the Hunter River* (1850). As it was not until the 1880s that a scientific approach was first documented in the archaeological study of Aboriginal sites in Sydney, and later led by the Australian Museum’s Robert Etheridge in the 1890s, the AML did not reflect this research until more than a decade after the publication of the 1883 catalogue.

---


Publication Formats

Almost half (47%) of the AML collection consisted of monographs when its first catalogue was published (see Figure 35). Related to this format are those 254 titles (21%) categorised as being part of a monographic series (a publication consisting of a series of volumes but each being a self-contained work), such as volumes belonging to the *Smithsonian Contribution to Knowledge* series. Monographs published in parts (a publication consisting of separate sections or volumes published over time) make up 7% of the collection and examples can be found in some of the zoological catalogues published by the British Museum. Serialised publications are represented by 124 titles (10%) and, though a relatively small proportion of titles in the collection, consist of 1089 volumes (39% of all volumes)—making up a significant part of the physical bulk of the library in 1883. The 173 titles (15%) identified as pamphlets or reprints are small publications or parts of publications that have been bound together and make up only 37 volumes.

Figure 35. Proportion of the collection in various formats at four points in time.
One revealing aspect of this analysis was the declining representation of the purely monographic form in the library (57% of the collection in 1836–63 compared to 47% for the whole period sampled). While the number of serial titles consistently represented around 10% of the collection for the periods sampled, there was a growth in serialised formats with a greater number of monograph serials and pamphlets and reprints kept in the collection.

The Age of Material Acquired

The Museum has celebrated the oldest, most valuable and often beautifully illustrated publications in its library for more than a century. This has tended to create the impression that much of this material was collected during the Museum’s early years and suggests an antiquarian approach in the early selection of library material. The database has provided the opportunity to test this impression and offers a much more nuanced understanding of the age of the material acquired by the AML up until 1883.

The database lists books published between 1554 and 1883, but of the titles published prior to the Museum’s incorporation in 1853, only 67 titles (6% of all books on the database) were published before 1800. The range of publication dates reveals a collection almost evenly split between books published before the Museum’s incorporation in 1853 (538 titles; 45%) and after incorporation (648 titles; 55%). Figure 36 shows the age of material acquired over time and indicates that there was a greater focus on older material up until 1863 than during any
Figure 36. Age of titles acquired in three decades.

other period. This reflects the donations of P.P King but also the purchases of the Swainson and endowment material and demonstrates not only the acquiring of historically important classificatory literature but also ‘gap-fillers’ identified at the time of the endowment purchase. While there is no manifesto articulating what sort of library the Board was trying to create in the late 1850s, the acquisition of some antiquarian texts of historical rather than practical interest suggests a desire to create a library familiar to its creators—one in the guise of the institutional models they had used back at home.

While there had clearly been some interest in acquiring historically significant titles for the AML, recent works had also been well represented in the collection from its earliest years. In the decade following the endowment purchase, between 1864 and 1873, recently-published material predominated, with 90 per cent of acquisitions published within the previous twenty years. This interest in newer material continued into the final decade covered by the database and, despite a large number of volumes acquired between 1874 and 1883 that included back
runs of earlier serials, over two-thirds (68%) of this material was less than twenty years old.

If Alexander Macleay had walked into the library described in the AML’s 1883 catalogue (over thirty years after his death), he would have recognised many of the older titles on the shelves, but it was not yet a collection either as large or rich as his own had been. He may have been interested in the newer zoological material but perhaps a little dismayed by the extent of the geological and fossil works held by the library. He would not have been threatened by the pro-evolutionary works because there were barely any on show, through a careful perusal of the serial literature and some of the monographs would have revealed a new direction in science that not even the conservatives still dominating the Museum Board would be able to resist in the ensuing decades.

**Conclusion**

This chapter has shown how the collection of a large, functioning library with a long history can be dissected in a way that reveals the earliest moments of its development and quantifies the literature available to the community which formed it. Those writing about the early history of science in Australia inevitably consider the development of the scientific infrastructure or, more specifically, the scientific *superstructure* which describes ‘the individuals, activities and institutions conventionally described in the history of science’. The database created for this study illustrates aspects of this superstructure through the AML’s books, their subject area, their origin and publication date and, in a few instances, the readers themselves.

The AML of the 1850s comprised mainly a serendipitous collection compiled from the tail-end of the two significant colonial libraries belonging to Phillip Parker King and William Swainson. More surprising, was the concerted effort of the Trustees, under Denison’s direction, to quickly complement this collection with new

---

scientific works from leading British institutions. Denison’s desire to develop a strong scientific library for the colony appears to have been of less interest to those members of the Board who had their own fine libraries. The preparedness, however, of the Colonial Secretary’s Office and the British Museum to facilitate the delivery of this material to Australia without receiving payment in cash or in kind was rare, even in the “golden age’ of the 1850s.  

The identification of the ‘endowment collection’, purchased at the beginning of the 1860s, has revealed not only a strategy to collect works of historical significance to fill the gaps left in the earlier collections acquired, but also an interest in newly published scientific material. Dr George Bennett was instrumental in forming a library that emulated the institutional collections he and his fellow Trustees had known back at home, but he also illustrated a restraint, or was restrained, in buying any natural history manuscript material that would have been expected in such a library and which he had acquired personally. This suggests a focussed approach in terms of the selection of material and a greater value being placed on printed material for the needs of the institution. The non-purchasing of early manuscript accounts of Australian zoology seems at odds with the public display of Ludwig Leichhardt’s manuscript ‘relics’ at the Museum in the early 1880s, but the mystery behind Leichhardt’s disappearance probably explains such interest.

The motivation behind Bennett’s long involvement with the AML appears a complex one. As a young man, employed as the AM’s first Curator, he had continually expressed his frustration at not being able to access the literature he needed in Australia. The magnificent libraries of the Macleay family appear not to have been readily available to Bennett in his early years in the colony but may well have set the bar high, along with the library of Charles Nicholson, in terms of his bibliophilic aspirations. His successful representation of John Gould’s publishing interests appears to have created some conflict with his fellow Trustees, and it was not long after the protracted sale of Birds of Australia to the Museum, in 1865,

along with the strengthening of his own library, that his interests in the AML seemed to wane.

Beyond the desire to recreate a library in the colonies that was familiar to its trustees, there is some evidence that the choice of material represented the intellectual interests and practical needs of those associated with the institution. The decline in the focus on entomological material over time appears to reflect a shift in the Macleay family’s influence over the institution, whereas the growth of the geological and palaeontological literature characterises local as well as international preoccupations. We also see the scientific interests of the Museum’s metropolitan mentor, Richard Owen, represented in the works he purchased on behalf of the AML with the first endowment. The purchase of introductory scientific works by Bennett in the late 1850s and early ‘60s, and his advertising of the library’s holdings in his articles in the local press indicates a vision for the AML that was broader than that held by the Trustees or some staff, such as Gerard Krefft.

The closed nature of the library suited many at the Australian Museum and there is little evidence of outsiders borrowing, except for a handful of naturalists and scientists who were to become closely connected with the institution, such as W.A. Haswell and Rev. J.E. Tenison-Woods. This is not to say people did not visit the library to consult the works, but the lack of evidence is challenging. How then can one argue that such a closed library could have any influence over scientific activity in New South Wales? In Chapter Three, the detailed examination of Krefft’s use of the collection suggests that works in the library enabled one of Australia’s best-known nineteenth-century naturalists to have a conversation with the metropolis. It is clear that Krefft honed his scientific cataloguing skills using material now identified by the database as being part of the first endowment, and this and later material helped him articulate his evolutionary views and challenge the fossil work of Sir Richard Owen.

There are numerous examples of nineteenth-century naturalists in Australia complaining about the limited access to scientific literature and this was by no
means limited to those working in the field. Those with means and large scientific book collections were far less disadvantaged and, as David Wade Chambers argues in his discussion of the ‘myths of scientific isolation’, it was the channels and regularity of communication, as well as the reception of ideas within the local intellectual community, rather than the distance between the metropolis and the periphery, that mattered most in the communication of science.99

It is clear that for those working in the Australian Museum in the early 1850s the scientific literature was limited, but so too were the expectations of the institution’s scientific input. By the early 1860s, the library had a sufficiency of literature to enable Gerard Krefft to create a zoological catalogue, even if somewhat derivative. By 1870, in addition to useful classificatory material, Krefft had some reference tools as well as the latest journals, which he used to engage with both the local community and the metropolis. There is no doubt that some important texts were not held in the AML, such as those relating to evolutionary thought, but we know that some of this literature was held in the private libraries of those associated with the museum and that it was the reception of Darwin’s ideas rather than geographic isolation that appeared to slow the communication of this theory in Australia. Gerard Krefft was discussing Darwin’s ideas in the early 1870s and using AML material to support his view and it can be argued that any professional failure he experienced at this time was more the result of his intellectual and social relationship with his peers in Australia than his separation from the metropolis.

Although the attitudes of the local intellectual community hampered the acceptance of ideas like evolution in Australia, the change in approach that was to filter out of Australian universities in the closing years of the nineteenth century soon impacted on those at the Australian Museum. The influence of biological sciences and new attitudes to the professionalisation of science were perhaps most visible in the new collections of the Australian Museum Library in the lead up to the First World War.

Chapter Seven: Scientific Specialisation and the Move Towards ‘Professional’ Information Management, 1882–1917

‘The Library is rapidly increasing in bulk, and the work of Registering, listing, and cataloguing the Books as they come in is of considerable importance’.

Sutherland Sinclair, Secretary and Librarian, AML, 1896.¹

When Sutherland Sinclair (1851–1917)*, the man responsible for the Australian Museum Library, commenced his job as Museum Secretary on 11 September 1882, he took over a library of almost 3,000 volumes that, by British provincial standards, was doing better than many of its museum counterparts back at ‘Home’. A report on provincial museums prepared for the British Association for the Advancement of Science in 1887 declared that ‘a good museum should have at least 500 volumes of the best standard works of reference on all branches of zoology, geology, and archaeology’.² Sutherland had commenced work at a time of new prosperity and the collection more than doubled in size in his first decade. By his death in 1917, the collection had grown to over 18,000 volumes (see Figure 38). The continual growth of the library and its specialist function placed a variety of demands on its small staff, and yet little is known about who worked in the library, how the library was accommodated, or how its material was classified, arranged or used at the time of Sinclair’s management. This period under study saw major changes in the development of science in Australia with the growth of activity in universities and government departments, greater specialisation and increased association between those working in science; it also saw an explosion in the production of periodical publications and the adoption of new library classification schemes and bibliographical subscription services to manage this information. Attempts to coordinate the interests of those supporting or working in libraries on the eve of

¹ AMS26 Secretary’s Report no. 12, 1895.
² British Association, ‘Report of the Committee upon the Provincial Museums of the United Kingdom,’ In Reports of the British Association for the Advancement of Science, 1887, p. 119.
Federation, through the Library Association of Australasia, were unsuccessful but had an impact on those in the AML. This chapter will examine these factors in relation to work in the Australian Museum Library between 1882 and 1917 and explore the relationship between scientific activity and special libraries at the end of the colonial period in New South Wales.

The Australian Museum, Scientific Change and the AML

During the last two decades of the nineteenth century the Australian Museum experienced considerable change, both in terms of its internal structure and its context within the Australian scientific landscape. The early 1880s saw the beginning of a string of scientific appointments to assist the Curator, E.P. Ramsay, in his management of the collection. Initially employed as temporary cataloguers, these staff members were soon made permanent and, by 1888, six ‘scientific assistants’ were working for the Curator in the areas of zoology (vertebrates), entomology, mineralogy, palaeontology, conchology, ethnology and invertebrate zoology. While the introduction of these separate departments signposted a move towards specialisation, many of the scientific staff employed in the 1880s and 1890s did not have a formal education in science though they were often very experienced in their fields. By the 1890s, biology had ousted natural history as the dominant science in Australian universities and its teachers were university-trained professionals running specialised courses. This divide between museum and university scientists was exacerbated by the latter’s impression that the continued focus on classification by museums was out of step with biologists’ focus on physiology rather than taxonomy and anatomy.3

Despite this apparent gap, many of the scientific workers at the AM were well respected in their field and included individuals such as Thomas Whitelegge, Edgar Waite (1866–1928), Alfred North, Charles Hedley (1862–1925)*, Robert Etheridge,

James Ogilby (1853–1925)*, and Allan McCulloch (1885–1925)*.  

Brian Saunders, in his recent study of the history of Australian ichthyology discusses at length the contributions of a number of the scientists at the Museum between the 1880s and the 1920s. While Saunders does not focus on the AML specifically, it is striking how reliant the scientists clearly were on the book collection while employed at the Museum and even after their departure. Some, like conchologist and bibliophile Charles Hedley, had considered the strength of the AM's specimen and book collections a welcome relief after experiencing inadequate collections at the Queensland Museum. In 1885, James Ogilby found that the library contained a good representative collection of ichthyological texts to support his classificatory work and he produced a number of important fish catalogues. Ogilby’s approach to the writing of these catalogues differed markedly from the derivative work of George Bennett and Gerard Krefft many years earlier. Their method, however, was apparently still being followed in the 1890s and prompted Ogilby to observe:

... I may as well take this opportunity of entering a strong protest against the practice which is so prevalent among writers on our fishes of copying the descriptions and remarks from the British Museum Catalogue without any attempt being made to test their accuracy, and by so doing perpetuating error, creating confusion, and indefinitely postponing the dawn of that accurate knowledge of our native fauna which every admirer of the native products of our country must ardently desire.

Ogilby was advocating the checking of species information against actual specimens and not relying solely on published texts compiled in the metropolis. Ironically, later health problems saw him lose access to the libraries he needed to ensure the accuracy of his descriptions.

6 Hedley was employed by the Australian Museum in 1889 soon after his resignation from the Queensland Museum. Strahan (1979), p. 47.
7 ibid., pp. 176–180.
An alcoholic, Ogilby had been transferred to contract work at the Museum in 1890 and his most infamous interaction with the AML had been in 1893, when specimens preserved in jars of alcohol, which he had been handling, were discovered hidden, drained and desiccated, behind books in the Library. Ogilby managed to continue making contributions to his field intermittently and it was in the same year that his *Edible Fishes and Crustaceans of New South Wales* (1893) was published for the World’s Columbian Exposition, in Chicago. Although prepared in a hurry, Ogilby’s catalogue relied on a number of different bibliographical sources (some local) and was combined with descriptions from fresh specimens and included detailed life history data. Ogilby managed to find employment at the Queensland Museum in 1901, but continued to rely on friends at the AM, such as Allan McCulloch, to look up references for him and copy out lengthy descriptions from the Library’s journals. Similarly, Edgar Waite, who had worked at the AM for twelve years, called on McCulloch to provide access to information in the AML after Waite had taken up a curatorial position at the Canterbury Museum, Christchurch, New Zealand, in 1906. Saunders identifies McCulloch as having made a contribution to Australian ichthyology that was greater than Ogilby or Waite but notes that he was still disadvantaged by the lack of access to literature and type specimens available in overseas institutions. Whatever its limitations, it is clear that by the early twentieth century, the AML was proving indispensable, at least for some zoologists working in New South Wales, Queensland and New Zealand.

In the popular press of the early twentieth century, the AM’s workers were conflated with university scientists. *The Sydney Morning Herald* observed, in 1907, that there were many challenges in undertaking scientific research in Australia. There was no leisured class prepared to devote itself to such work and young

---

10 ibid., p. 181.
13 ibid., p. 226.
14 ibid., p. 275–276.
15 Ibid., p. 407.
graduates were ‘in a hurry to earn a livelihood in the world’. As a consequence, scientific research was left to university professors in their ‘spare time’, scientific government departments and museums.\textsuperscript{16} Twenty years earlier, in 1888, current and future AM staff had participated with their university colleagues as well as amateur naturalists in the first meeting of the Australasian Association for the Advancement of Science (AAAS), under the leadership of AM Trustee, Archibald Liversidge. Etheridge was editor of the first proceedings and five other AM staff were members.\textsuperscript{17} Etheridge soon pulled away from the AAAS, however, proposing to Ramsay, who was not a member of the Association, that the Museum should establish a journal to promote the research of its scientists. Founded in 1890, the \textit{Records of the Australian Museum} provided a focus for the work of the institution but, at the same time, quarantined the research output of its staff from other publications.\textsuperscript{18}

There may be evidence of arrogance at times in the AM’s relationship with individuals and institutions, but this period also marked involvement in both Australian and international library and museum associations. The AM contributed papers about the Museum and its activity to the Second International Library Conference (London, 1897), The Museums Association Meeting (Sheffield, 1898), and the Library Association of Australasia (Sydney, 1898). As the country moved towards Federation, the Museum appeared to be attempting to mark its place both nationally and internationally and the AML was promoted as part of this achievement. Through its access to periodical and exchange literature in the AML, the staff of the Museum were particularly linked to international developments in the natural sciences but also to any trends that related to science and bibliography. There are numerous examples of significant bibliographical work by AM staff at this time, such as Etheridge’s \textit{Contributions to a Catalogue of Works, Reports and Papers on the Anthropology, Ethnology and Geological History of the Australian and

\textsuperscript{16} ‘Science in Australia’ (1907), ibid.
\textsuperscript{17} A.S. Olliff, F. Ratte, J. Brazier, T. Whitelegge and S. Sinclair were members.
\textsuperscript{18} ‘No communications or papers relating to Museum work or specimens shall be allowed to appear in any other publication [other than the \textit{Records of the Australian Museum}] without the sanction of the Board.’ ‘General Rules’, \textit{By-Laws, Rules and Regulations of the Australian Museum, Sydney: Charles Potter, Government Printer, 1892, p. 13.}
However, the extent to which the scientists were engaging with the latest library cataloguing methods is perhaps more surprising, as evidenced by Edgar Waite’s article in *Records of the Australian Museum* in 1900 on his adaptation of a library card system for the classification of specimens. These international developments in library economy were of just as much interest to those working in the Australian Museum Library at this time and the application of some of these ideas reveals a level of sophistication in Australian special libraries not previously known at this time.

### The Australian Museum Library Staff and their Work

In her study of early education in librarianship, Maureen Keane considered to what degree those working in Australian libraries at the turn of the twentieth century were exposed to any forms of library education. There were some calls by practising librarians, such as H.C.L. Anderson, at conferences held by the Library Association of Australasia (LAA), to consider professional examinations. However the focus of the LAA was primarily on the development of libraries rather than their staff and training was limited to in-house training, such as the 'library economy' classes established by Anderson for junior staff at the Public Library of New South Wales, and, more commonly, apprenticeship-style training. This section on staff employed at the Australian Museum Library focuses on Secretary and Librarian, Sutherland Sinclair, and his career in relation to the development of the AML. This section also examines who worked in the AML, their roles and duties.
and looks for evidence of how they were trained and whether this had an impact on the Library.

**The Secretary/Librarian: Sutherland Sinclair**

Sutherland Sinclair may have been responsible for the Australian Museum Library for almost 35 years until his death in 1917, but it was not library experience that secured him the job as Museum Secretary. Indeed, like most people assigned to the management of libraries at this time, the Secretary had no say about the choice of books or the booksellers used—his function was purely clerical. Sinclair, the son of a Presbyterian reverend, was devoutly religious and, after completing school at the age of fifteen in Greenock, Scotland, he commenced a mercantile career in Glasgow. In 1871, he departed on a world tour in which he visited Sydney, Asia, South Africa and North America before returning home in 1873. Having resumed his business career he then emigrated to Australia for health reasons, in 1879.24 Prior to Sinclair’s appointment, in September 1882, the Museum Secretary position had been sullied by the embezzlement of over £500 by its previous incumbent and Sinclair’s qualifications were trumpeted as those of ‘a gentleman of considerable attainments and undoubted integrity’.25 The Trustees remained wary, however, and the new Secretary was required to provide £1000 as security.

As defined by a new set of Museum by-laws, published in 1882, Sinclair’s responsibilities related primarily to managing the institution’s correspondence, accounts and the business of the Trustees. His hours were set from 10am to 1pm daily but could be extended when needed. In terms of his library duties, his role was clerical: he was expected to maintain a list of publications acquired by the institution and ‘keep a Register of all books in the Library and enter their proper titles in the Library catalogue’.26 The Secretary’s library responsibilities had been

---


considerably trimmed by the by-laws and in a move harking back to the days of
Krefft, when both Curator and Secretary positions were combined, the Curator had
been given the responsibility for the books in the library and their classification.²⁷
It appears that E.P. Ramsay not only wanted to choose the AM’s literature but he
also wanted to control its organisation. This responsibility was picked up by W.A.
Haswell in his role as Acting Curator, during Ramsay’s absence in 1883, and drove
the classification and arrangement of the AML collection and the printing of the
first library catalogue.

While almost £1500 had been spent on book purchases over Sinclair’s first three
years of employment and accommodating these acquisitions had become
increasingly difficult,²⁸ it was not until early 1886, following Sinclair’s return from
a trip to Britain, that he first proposed changes to the way in which the library was
managed. Sinclair presented to the Trustees a report on museums he had visited
while on leave,²⁹ and the trip provided the impetus for his presentation of a ‘code
of library regulations’ which revealed a series of new library practices. In March
1886, the Board ratified the new rules and these were fully listed in the Board
minutes in the following month (Appendix J).³⁰

The new rules protected the Trustees’ borrowing rights but the administration of
these rights had been tightened. Borrowers not only had to obtain their books
from either the Secretary or Curator, but were required to leave ‘a signed card’ in
the space left on the bookshelf and fill out a register. When completed, the books
were to be returned to a library table to be examined and shelved by the Secretary
or Curator. The Curator’s presence in these rules suggests that Ramsay wished to
be involved in the interaction with library users, but the preparedness of these two
senior figures to shelve books suggests a relatively low volume of use at the time!

²⁷ ibid., p.15. In the previous published by-laws these had been the responsibilities of the Secretary:
Australian Museum, By-Laws of the Australian Museum, Sydney, New South Wales. Sydney:
²⁸ See Australian Museum Annual Reports, 1884 to 1886.
²⁹ S. Sinclair, ‘Sinclair Reports on Museums Visited’, Report no. 7, 3 November 1885. Listed in AMS
34 Index to Reports, 1885 but since destroyed.
³⁰ AMS1, Trustee Minutes, 20 April 1886.
Yet this low-level public engagement was to be challenged by the most significant rule on the list: ‘visitors will not be permitted to take books out of the Library, but may be allowed to consult them in the Board room’. Up until this point access to the library for outsiders had been difficult and relied on a relationship with one of the Trustees or a formal request in writing to the Board. C.W. Holgate reported, following a visit to the library in 1884, that access was available to those applying to the Trustees and ‘that students at the museum are permitted to use the Library on weekdays between the hours of 12 and 5pm; but it is not largely attended’.\textsuperscript{31}

Of all the library rules published over the next twenty years, it was the variation in the rule stipulating visitor access that marked the gradual opening up of the AML to outsiders. In 1890, Sinclair stated that students were allowed to use the library between 10am and 12 noon and sometimes longer if convenient. This contradicts Holgate’s earlier report, probably reflecting the relocation of the library to a tin shed while a new library was being fitted out at this time.\textsuperscript{32} In 1892, visitors could use the new library between 10am and 3pm,\textsuperscript{33} and by 1908 the hours had been adjusted to 10am to 4pm.\textsuperscript{34} While the intention of the Museum may have been to offer the public improved access to its library, the reality of the Museum’s overcrowding had taken such a toll that by 1911–12 there was nowhere available for library visitors to study.\textsuperscript{35}

Sinclair’s foray into library management appears to have been well-received by the Trustees and over the next 30 years he would oversee ten library staff (Appendix K) and manage the registering, cataloguing and binding of approximately 15,000

\begin{thebibliography}{9}
  \bibitem{31} C.W. Holgate, \textit{An Account of the Chief Libraries of Australia and Tasmania}, London: Chiswick Press, 1886, p. 44.
  \bibitem{32} AMS25 General Reports, no. 4, 1891, Sinclair testimony, p.5.
  \bibitem{34} Australian Museum, \textit{Act of Incorporation, By-Laws, Rules, and Orders of the Australian Museum, Sydney, New South Wales}, Sydney: F. Cunninghame and Co., 1908, p. 23.
\end{thebibliography}
volumes, co-ordinate a publication exchange scheme of over 300 correspondents by 1902, introduce a new card catalogue system, engage with international bibliographical services, implement and administer sectional libraries in the various scientific departments, supervise an interlibrary loan system at the AML, participate in Australia’s first union catalogue of serials, make contributions to Australian and international library conferences, maintain the latest thinking in collection care and book conservation, and relocate the AML to an entirely new library space. As a member of both the Royal and Linnean Societies of N.S.W., his interest appears to have been anthropological rather than biological and probably reflected a religious missionary perspective. Whatever his scientific leanings, and they appear only to have been those of an amateur, there is no indication of whether he assisted staff or visitors in finding information in the library collection. There are some examples of public enquiries answered by both E.P. Ramsay and Robert Etheridge in the Curator’s private letter book, and their responses often included the recommendation of references. For a short period, between 1899 and 1904, the Museum annual reports listed public enquiries received for each year. Most are scientific in nature but it is possible that non-scientific staff were assisting the public with enquiries such as ‘inspection of Gould’s “Mammals of Australia,” and assistance with illustrations of Marsupials’ or regarding ‘prints of old Sydney’.

Whether he provided much reference assistance or not, Sinclair asked for more help in the library in 1890 when he participated in an enquiry investigating staff

36 When Sinclair commenced in 1882 there were approximately 3,000 volumes in the AML. In 1904 Sinclair reported that the AML held approximately 11,431 volumes (AMS 26, Secretary’s Report no. 7, 1904). Between 1905 and 1915, Sinclair reported in the AM annual reports that 6,183 volumes had been registered (not including pamphlets and some periodicals).
37 He was elected a member of the Royal Society of NSW in 1883, SMH, 5 July 1883, and the Linnean Society of NSW in 1887, SMH, 27 May 1887.
pay and duties at the Museum. While we can extrapolate many of the library-related functions undertaken by Sinclair and his staff from the Secretary’s communication with the Trustees, it is a challenge to identify the day-to-day activity and the distribution of tasks undertaken so long ago. Fortunately, the Australian Museum Archive holds a copy of ‘The Report of the Committee Appointed to Enquire into the Salaries and Duties of Employees’—a unique snapshot of Museum employees in Sydney in the late nineteenth century, and describes their day-to-day work and relationships. The committee of Trustees interviewed all the museum staff about their work and then asked management to comment on the resulting transcriptions. A draft of the report was presented to the Board in January 1891 and the final report, compiled after twenty-three meetings of the Committee, comprised typed transcriptions of interviews with each staff member and copies of supporting correspondence and reports. The surviving archival copy also contains E.P. Ramsay’s handwritten comments throughout.\footnote{Report of the Committee Appointed to Enquire into the Salaries and Duties of Employees’, AMS 25 General Reports, no. 4, 1891.}

In the report, Sinclair and his clerk, William H. Hill, discuss their roles in the library and additional comments about the library are made by the Curator and two scientific staff members. While some of these reflections will be discussed later in this chapter, Sinclair’s observations throw light on his library work and also had some impact on the Committee.\footnote{The material in the following two paragraphs is sourced from ‘Sinclair’, ‘Report of the Committee’ (1891), pp. 1–3.} In 1890, Sinclair reported that he had shifted to full-time work a year earlier and was on a salary of £400 (two-thirds the salary of the Curator and the second highest salary at the Museum). In addition to his management of the Museum’s correspondence and accounts, Sinclair managed all library administration. At the core of his work was his ‘registering and keeping a check on the books and cataloguing them’, which also involved despatching pre-printed acknowledgement forms for all acquisitions, stamping new material with the library stamp, writing and attaching location spine labels, providing staff access to the collection and managing circulation. He states that outsiders
requested access to the collection only ‘two or three times a month’, which he provided.

The purely clerical duties, such as filling out acknowledgement forms, stamping books and attaching spine labels were undertaken by Sinclair’s clerk, Hill, who had been spending increasing amounts of time in the library because of its growing workload. Sinclair believed Hill had overstated his library duties in his statement to the Committee and stressed that Hill ‘does not number the books’ and that he needed to check all of Hill’s work. Sinclair said he could catalogue twenty-four books in a day and a half and that cataloguing took up ‘a good part of his time’. While he believed that the printing of the catalogue would provide some relief, he thought there would continue to be enough work to employ a librarian full time. He suggested that he should continue to manage the library with a Library Assistant employed to do most of the library work under his supervision. The Committee agreed that the Secretary ‘should have charge of the library’ and in the years following he was referred to as ‘Secretary’, ‘Secretary and Librarian’ or ‘Librarian’, depending on the context. The Committee, however, ignored Sinclair’s suggestion of employing an Assistant Librarian and, instead, recommended he have a junior clerk, a recommendation which the Board supported.44

Sinclair may not have received the library assistance he had requested from the Trustees, but the 1890s were to start well with the construction of a new library in the remodelled Lewis wing. A third floor was added to the structure in 1890–91, during which time the Library was stored in a custom-built iron shed in the Museum grounds (see Figure 37). In June 1892, 6,200 volumes were arranged on the shelves of the new library, located in two rooms, on the first floor of the modified building in, what Sinclair hoped, would be ‘their permanent places for many years to come’.45 He no doubt regretted these words, when, less than twenty

44 AMS1, Trustee Minutes, 6 October 1891.
45 AMS25 General Report no. 5, 6 June 1892.
Figure 37. The AML when temporarily located in a corrugated iron shed in the grounds of the Museum, 1890-92.
From left: A.J. North, K.H. Bennett, unknown, E.P. Ramsay. The unlined walls indicate the harsh conditions to which the collection was exposed during the two years it took to build the new library. ML PXA 1022/5.
years later, the Museum lobbied the government for a new and much larger library, but without success. The Library’s new accommodation would turn out to be one of the high points in what was a difficult decade following the collapse of the New South Wales economy in 1893. In that year, twelve of the Museum’s thirty-three employees were retrenched, including Sinclair’s new Junior Clerk, and the parliament’s funding was cut by almost half. The cuts flowed onto the AML and the ‘golden decade’ of library spending, between 1884 and 1893, when £5,021 was dedicated to book buying,\textsuperscript{46} was followed by a decade in which only £2,106 was spent on books and binding.\textsuperscript{47} While this was a significant cut in real terms, the percentage of the AM’s budget dedicated to books and binding remained virtually

\textsuperscript{46} Total based on AM \textit{Reports of Trustees} for the years 1885–94.

\textsuperscript{47} Total based on AM \textit{Reports of Trustees} for the years 1895–1904–05.
unchanged (4.2% for 1894–1903 vs 5.0% for 1884–93). This consistency of spending reflects not only support from the Curator and Trustees but a library collection of utility and a level of maturity that required the maintaining of its periodical subscriptions.

The Depression severely impacted on the running of the Museum for over a decade and it was not until 1909 that the budget and staff numbers returned to the levels of the early 1890s. Yet the period between the late 1890s and early 1900s was the most important in terms of Sinclair and the Museum’s engagement with the library movement and modern library practice in Australia and internationally. Sinclair not only contributed a paper to the Transactions and Proceedings of the Second International Library Conference, published in London in 1898, but he also actively participated in LAA’s Sydney conference in the same year.

There is a correlation between Sinclair’s involvement with the library conferences of the late 1890s and his contemporaneous interest in the questions of classification and how best to arrange the Library’s catalogue. Sinclair was primed for the technical papers published by the conferences by his purchases of numerous technical library publications from mid 1898 onwards (see footnote 141). A year earlier he had first engaged with the international bibliographical service provided by the Bibliographical Council of Zurich and, later, with index cards on scientific American periodicals produced by the Library of Congress. By the early 1900s Sinclair had been an early adopter of the Universal Decimal Classification (UDC) scheme for the AML catalogue and was entirely self taught in his evaluation and application of the system. (For further discussion of Sinclair’s involvement with the library conferences and his work on the AML’s catalogue see the next section, ‘Keeping Track of the Literature.’)

Much of Sinclair’s best work in the AML appears to have been undertaken prior to illness in 1906, but he continued to work strategically with the library collection, particularly relating to its conservation management. The AM Archives reveal a

---

48 Strahan (1979), p. 50.
level of engagement with this issue that is surprising in a library of the late nineteenth century and may well reflect its museum context—where there was a constant battle to protect specimens from various forms of attack such as insects and mould. In an overview of the development of library preservation in Australia, Ross Harvey observes that ‘only minor interest was shown in preservation in Australia up until the 1960s’. The earliest example he provides is of a paper presented at an LAA conference in 1900, entitled ‘The Relation of the Heating Arrangements in Libraries, Museums, Etc, to the Conservation of Books ...’. This was one of a number of papers on conservation that Sinclair had used as an example to convince Etheridge to spend the 10/- cost of the conference Proceedings (see footnote 123 for the discussion). With the construction of the new library in the early 1890s Sinclair regularly dealt with conservation-related issues:

a near disaster occurred when the library was inundated with water during the remodelling of the Lewis wing in 1891; Holland blinds rather than leather flaps were requested for the protection of the bookcases in the new library in 1892; in the same year Sinclair reported that some books stored in the iron shed during building had been damaged by Dermestes beetle, mould and excessive heat and would require rebinding; boring beetles were discovered in the new bookcases in 1894; and concerns about dust and mould were documented in 1895.

50 ibid.
51 AMS24 Curator’s Report no. 8, 1890.
52 AMS26 Secretary’s Report no. 2, 1892. An unnamed member of the Board had first requested the installation of blinds in 1887: ‘In accordance with a wish expressed by a member of the Board I have the honor to request permission to have blinds erected over the shelves in the Library to protect the books from dust etc.’ AMS24 Curator’s Report no. 3, 1887. Sue Reynolds notes that such blinds had been fitted to the shelves of the new library of the Supreme Court of Victoria in 1884 and had been advocated by Edward Edwards in Memoirs of Libraries: Including a Handbook of Library-Economy (1859). Sue Reynolds, ‘The Establishment of the Library of the Supreme Court of Victoria, 1851-1884: Antecedents, Foundation and Legacy’, unpublished Ph.D. dissertation, Charles Sturt University, 2008, p. 254.
53 AMS25 General Report no. 5, 1892
54 AMS24 Curator’s Report no. 5, 1894.
Evidence of a scientific approach to the challenge of preserving library material in
the Museum is best revealed in Sinclair’s report to the Trustees on bookbinding
leather, in 1906.\textsuperscript{56} For over a decade the AML had noticed the deterioration of its
leather binding and had attributed the problem to insects. However, having just
acquired \textit{Leather for Libraries} (1905) for the AML,\textsuperscript{57} Sinclair discovered that the
damage was believed to have been caused by a high acid contact created by
modern tanning and leather dying processes. The Museum tested the level of acid
in the leathers used for its binding and found levels high enough to account for
their decay. Sinclair exhibited examples of AML books showing leather decay to the
Trustees and advised them that three bookbinders were prepared to supply
leather treated according to specifications recommended by the Society of Arts
(London). This sustained and detailed library conservation suggests that, at the
turn of the twentieth century, at least some Australian libraries were employing
scientifically informed methods to combat the threats to the preservation of their
collections.

These threats to the collection had been exacerbated by the ongoing
accommodation problems, which had returned only a few years after the
completion of the new library in 1892. As we have seen in the previous section, the
demand for sectional libraries had been made by Etheridge as early as 1890.
Ramsay had resisted but, in 1902, Etheridge acknowledged the AML’s burden of its
ballooning serials and ordered that 300 feet of shelving be installed in the studies
of the scientific assistants.\textsuperscript{58} Here, works of reference and subject-specific
monographs appropriate to the various scientific sections were relocated. The
main library quickly refilled however and in 1910 the Museum Trustees formally
proposed a new extension to provide accommodation for ‘the Library, staff, and
administrative purposes’.\textsuperscript{59} It was a proposal that would have no doubt provided
relief to Sinclair and his staff but would also have been a major organisational
undertaking. W.A. Rainbow had been promoted to Assistant Librarian in 1910 and

\textsuperscript{56} AMS26 Secretary's Report no. 6, 1906.
\textsuperscript{57} E. Wyndham Hulme et al., \textit{Leather for Libraries}, London: The Library Supply Co., 1905.
\textsuperscript{58} AMS24 Curator’s Report no. 9, 1902.
\textsuperscript{59} AMS1, Trustee Minutes, 7 October
relieved of his clerical duties—freeing him to focus on the Library’s move. In late 1912, both Sinclair and Rainbow toured the Melbourne Public Library to examine the annexe building and its domed reading room, then under construction, with the expectation of applying the results of their study to the AML redevelopment. The Government Architect’s Office, under the direction of W.L. Vernon, had designed a narrow-fronted extension that abutted the eastern end of Vernon’s remodelled Lewis wing. The extension faced onto William Street, with a grand pediment supported by seven large columns and would have made an impressive entrance to the new library (Figure 39). The plans allocated half of the first and second floors to the library with a floor space of approximately 2,500ft². The extension idea was dropped after the outbreak of the War and Sinclair went on extended sick leave in late 1916. He died in May of the following year.

There is little evidence of Sutherland Sinclair’s library work in the history of Australian libraries, particularly his preparedness to adopt the newest of information systems to manage a large and specialised collection. He had initially questioned the application of the standard Dewey Decimal Classification system in a special library context, but had then embraced the more experimental UDC. It is beyond the scope of this thesis to evaluate whether Sinclair’s use of the prototype UDC at such an early stage set an example for later special libraries in Australia, but we know that as early as 1901 he had assisted with a request from a young geologist, Clement F.V. Jackson, for guidance in ‘library work and arrangement’. One wonders whether it was the sharing of Sinclair’s self-taught expertise that would later sustain his apprentice, William A. Rainbow, in his 34-year career as the first dedicated Librarian at the AML.

AMS9 Letters Received, R39/12, W.A. Rainbow to the Secretary, Australian Museum, 6 December 1912.
AMS1, Trustee Minutes, 6 October 1916.
The proposed library space lay over two floors behind the four left-hand-side windows beneath the pediment. Australian Museum Archives AMS155/P5.

Figure 39. Plans for Museum extension with new library, 1911.
The Assistant Librarian: William Alfred Rainbow

Born at Marrickville, Sydney, William Alfred Rainbow (1886–1958) (see Figure 40) was the son of the Museum’s entomologist, William Joseph Rainbow, who worked at the Museum until 1919. Educated next door to the AM at Sydney Grammar School, it seemed almost a *fait accompli* that his first job should be at his father’s workplace. Although we do not have the benefit of a source like the 1890 report on staff duties, Sinclair provides a few paragraphs on his assistant’s work and skills in a reference written 1911.64

First employed as a Mechanical Assistant in 1902, Rainbow was assigned to the Mineralogist prior to his transfer to the Library, in 1903. In July 1906, he was promoted to the position of Library Assistant and Junior Clerk and ‘suddenly thrown on his own resources’ when Sinclair was taken ill.65 Rainbow clearly impressed Sinclair in the ‘way he rose to the occasion’ and he continued his dual library and clerical role until his promotion to Assistant Librarian, in 1910. This promotion, along with an increase in salary, placed Rainbow in charge of registration and the arrangement of books as well as much of the cataloguing and classifying. In writing his reference, Sinclair appears concerned that Rainbow’s classification skills are too specialised for any other library:

> The system of classification adopted in this Library is the ‘Dewey Decimal Classification’ supplemented by the Zurich ‘Concilium Bibliographicum’ and the Brussels ‘Institut International de Bibliographie’ but Mr. Rainbow has studied other systems and understands the general principles of classification.66

The half dozen titles relating to classification and library practice acquired just after his promotion, most labelled with his name or position title, suggest his training was ongoing after his appointment.67

---

64 AMS 49 Curator’s Private Letter Book, Box no. 6, S. Sinclair to Whom it May Concern, 20 January, 1911, p. 283.
65 ibid.
66 ibid.
Figure 40. Interior of the AML, c.1918.

_W.A. Rainbow, Librarian, and W. Cleary, Library Clerk. Note bookcases placed in front of fitted bookshelves and rolled blinds to keep the contents clean._

For the next five years, Rainbow and Sinclair worked together, planning their new library and trying to maintain access to new information during the War, when the Library budget was frozen and many European serials were suspended. In late 1916, Sinclair fell ill and Rainbow was made Acting Librarian. Following Sinclair’s death in May 1917, the AM Trustees resolved that ‘Librarianship [is] to be regarded as a separate appointment, and Mr W.A. Rainbow (Assistant Librarian) promoted thereto.’ Rainbow was to become the first dedicated librarian at the Australian Museum, but it took another 40 years before a professionally trained librarian, Miss Mary G.E Davies B.Sc., L.A.A, was employed to manage the AML.

**The Library Clerks and Cadets**

Until his death in 1917, Sinclair had supervised ten Museum staff who worked on library activity. Of these, none appear to have had any library experience or training prior to their employment. Until W.A. Rainbow’s appointment as Assistant Librarian and Junior Clerk, in 1906, Sinclair had relied on his general clerk to work with him in the library. Two clerks, William H. Hill and Frank T. Clark were employed consecutively on library duties, between 1885 and 1904, until the much younger Rainbow took on this role. From then on library assistants were usually teenagers, many of them employed as part of a museum cadetship system in which they were to be trained on the job.

Prior to the engagement of Rainbow, those working in the Library had been older and on higher incomes: William Hill, for example, was sixty-five years old in 1890 and earning £140 per annum. We have a strong sense of his work in the library, in 1890, from both his and Sinclair’s descriptions. He filled out about fifty acknowledgement forms a month for donations, books and periodicals; he had stamped and attached spine labels to 499 books over the previous year; and he gave out, and received, an estimated 138 volumes from staff over the previous three months. It seems likely that Frank Clark would have undertaken similar

---

68 AMS1, Trustee Minutes, 7 September 1917.
69 ‘... giving out and receiving back from scientific staff—Etheridge 38 since 1st January—he has more than the other members of the staff—say 20 apiece’. ‘W.H. Hill’, *Report of the Committee* (1891), p. 22.
duties until around 1906, when Rainbow was appointed Assistant Librarian and Junior Clerk.

Not long after Rainbow’s appointment to his new position, three cadets, Roy Kinghorn, Marcel Aurousseau and Anthony Musgrave were assigned in succession to the Library between 1907 and 1910. The cadet system had been introduced in 1907 where boys were ‘engaged as assistants to the Scientific Staff with a view to training them for the future’. For little pay (Kinghorn started as a Volunteer Cadet), the boys were expected to benefit from the on-the-job training they would receive. Ronald Strahan is critical of the system and believes that it entrenched a generation of Museum staff who were trained by self-taught mentors and who did not benefit from university training and exposure to the ‘new ideas that were sweeping through the biological sciences’ at that time. The cadets were, however, provided with the opportunity to study at the Sydney Technical College, and those who could meet the matriculation requirements, like Marcel Aurousseau, attended the University of Sydney. Books were also purchased by the Library for the cadets in 1911: each cadet was given a copy of Parker and Haswell’s *A Text-Book of Zoology* and additional books were bought for the cadets studying at university. Why these three particular boys were assigned to the Library is undocumented and whether the skills they attained there benefited their subsequent careers is unknown. However, both Kinghorn and Musgrave became senior scientific staff at the Museum and Aurousseau left to follow a successful career as a geographer overseas, also translating and editing an important publication of the letters of Ludwig Leichhardt for the Hakluyt Society and published by Cambridge University Press.

Aurousseau was interviewed in 1977 about his early life and he briefly mentioned his experience at the AML, where he started almost immediately after joining the


71 Strahan (1979), p. 56.

72 AMS26 Secretary’s Reports nos. 5 and 6, 1911.
Museum. He remembered being trained in making up volumes for binding and the general care of books and says he ‘enjoyed it very much’. More importantly, he said that the Library gave him ‘access to practically all the current scientific literature of the time’. Aurousseau was only seventeen years old when he started, but he specialised in geology and chemistry at the University of Sydney and graduated with a Bachelor of Science. One cannot underestimate the value of such a strong collection of literature, the importance of specialised library staff as models and exposure to excellent bibliographical sources through the AML’s card catalogue and bibliographical subscription services.

The cadet system lapsed in the second half of the decade and a number of Library Clerks took on the junior role in the Library, on a salary of £52 per year. Of the four Clerks employed between 1913 and 1917, only one, F.A. McNeill, went on to become a Curator at the Museum and he stayed there for almost fifty years.

**Keeping Track of the Literature**

It had been back in Krefft’s day, in the early 1860s, when the AML had first acquired early serial indexes, such as *Bibliotheca Zoologica* (1861) and *Record of Zoological Literature* (1865–), to enable scientists to identify the literature pertinent to their area of study. These were small endeavours when compared to later serial indexes, such as the Bibliographical Council of Zurich’s *Concilium Bibliographicum* which, by 1902, had published more than 11,000,000 cards. Yet to benefit from such a service a library needed to have control of its own collection—to know what it had and where to find it. For almost two decades after the publication of the AML’s catalogue in 1883, a major part of Sinclair’s library work related to the preparation of the catalogue for a new edition. Part of the

74 ibid.
75 AMS49 Curator’s Private Letter Book, Box no. 6, S. Sinclair to F.A. McNeill, 10 February, 1915, p. 458.
76 Anon, ‘New Departures in the Bibliographical Work of the *Concilium Bibliographicum*,’ *Science*, vol. 16, no. 417, 1902, p. 1024.
motivation had been to conveniently share the contents of the library with the Museum staff and external scientific workers. This desire to communicate the AML’s holdings to its user base, however selective, also appears to have been behind the AML’s earlier collaboration with nine Sydney libraries to create a union serial catalogue, in 1889. This section explores the AML’s attempts to maintain a publishable manuscript catalogue, its involvement with the Catalogue of the Scientific Serial Literature in the Following Libraries in Sydney, N.S.W..., and the adoption of the latest bibliographic subscription and classification services.

A Published Catalogue

Following the publication of the first AML catalogue, brief supplementary catalogues, each barely more than twenty pages, were published in 1885 and 1886.77 This was the limit of the AML’s regular supplements and printing was postponed in 1889. In 1890, Sinclair reported that he was still working on the catalogue and it had been arranged as follows:

I. General Alphabetical Catalogue

II. Periodical, Proceedings of Societies, Pamphlets &c

III. Classified subject index,78

Part I consisted of a rough series of slips of paper ordered alphabetically in a box which, if a catalogue was not to be printed, he would reformat for long term use, and Part II was ready for printing. Sinclair argued that a printed catalogue offered Trustees and Museum officers a copy for reference, while the same advantage could be offered to scientific workers at universities and societies in exchange for their publications. Sinclair was given approval to print a catalogue for no more than £60 but this was not followed through.79


78 AMS25 General Report no. 4, 1890.

79 AMS1, Trustee Minutes, 6 May 1890
With the relocation of the library and the boardroom to a tin shed during the construction of a new library, between June 1890 and May 1892, there was little time to work on the catalogue. So precious was the manuscript catalogue, Sinclair requested that the boxed slips and listings be separated from the collection and locked away in the Museum safe for the duration of the renovation in case of disaster.\textsuperscript{80} Once the library had been rehoused in June 1892, Sinclair reported that he was ready to make preparations to print the new catalogue.\textsuperscript{81} An assistant was employed to help with the final preparation,\textsuperscript{82} tenders were sought and a printer chosen to print 500 copies of Parts I & II at a cost of approximately £100.\textsuperscript{83}

The Depression of 1893 put a stop to the publication and a compromise publication of a list of the Library’s pamphlets was proposed but appears not to have been published until 1906.\textsuperscript{84} It is clear that the economic crises of the 1890s finished off any chance of a major catalogue being printed by the Museum. The cost was too high for a library focussed on its institutional users and the relatively rapid growth of the collection was also a challenge. Sinclair continued to report that the catalogue was in manuscript and ready to print when funds were allocated, but from 1898 onwards he never again raised the issue of a publicly available catalogue in his reports to the Trustees.

The baton shifted momentarily to Curator Robert Etheridge, in 1906, when he announced to the Trustees that the acquisition of a new printing machine for the Museum enabled the conversion of the manuscript card catalogue to a printed card catalogue. Etheridge also suggested that a limited run of pamphlet versions of the catalogue could be distributed to staff, Trustees and principal libraries in New

\begin{flushleft}
\textsuperscript{80} AMS25 General Report no. 5, 1890.
\textsuperscript{81} AMS25 General Report no. 5, 1892.
\textsuperscript{82} AMS25 General Report no. 6, 1892
\textsuperscript{83} AMS25 General Report no. 7, 1892 and BOTM 5 July 1892.
\textsuperscript{84} AMS1, Trustee Minutes, 8 August 1893. A ‘second edition’ of the work was published in 1905 consisting of the 1893 list combined with a 1905 addendum. There is no evidence that the 1893 list was actually published. Australian Museum Library and S. Sinclair, \textit{Catalogue of the Library of the Australian Museum}, 2nd ed., Sydney, 1893–1905.
\end{flushleft}
South Wales. He warned that this printing could only take place between ‘more legitimate label printing’ and, though slow, would be a credit to the Museum. In 1908, Etheridge presented a case, at the request of the Trustees, for the in-house printing of a full library catalogue, which though approved, was never acted upon because the printer was too busy to complete the task. Cards continued to be printed for the card catalogue for the remainder of Sinclair’s tenure.

The failure of the AML to ever publish more than one full printed catalogue was not for want of trying, but for a library that had labelled itself not only representative of a ‘national institution’ and the ‘principal scientific library in the Continent’, the economic reality of trying to communicate a highly specialised library collection beyond its own walls was the final arbiter.

**Library Collaboration**

The AML may have struggled to communicate its collection independently at the turn of the century, but during the previous decade it had demonstrated an interest in collaborating with fellow libraries and a preparedness to contribute to the emerging library associations in England and Australia. In the late 1880s, the Museum had participated in a collaborative experiment that resulted not only in Australia’s first scientific union catalogue, but also in one of the earliest examples of such a catalogue anywhere in the world. A rather humble affair, the *Catalogue of the Scientific Serial Literature in the Following Libraries in Sydney, N.S.W...* (1889), forms a line of descent from one of the earliest American union catalogues, compiled in 1879, through to the *Scientific Serials in Australian Libraries* of the late 1950s.

---

85 AMS24 Curator’s Report, no. 3, 3 February, 1906.
86 AMS24 Curator’s Report, no. 10, 1 October, 1908.
88 AMS107, Library Correspondence and Letter Books, R. Etheridge Jnr. to The Librarian, Royal Society of Edinburgh, Scotland, 28 August 1915.
90 W.T. Dayton and T.P. Anderson Stuart (1889).
Professor Thomas Peter Anderson Stuart, Chair of Anatomy and Physiology, and Dean of the Faculty of Medicine at the University of Sydney, had discovered, upon his arrival in Sydney in 1882, a dearth of scientific periodical literature. Described as an ‘obsessive, even compulsive, organizer’, he convinced nine libraries, including the Australian Museum, to contribute £10 each to defray the cost of compiling a catalogue of their scientific periodical holdings. While the catalogue relied on the support of a combination of government and non-government institutions, the Colonial Treasurer, J.P. Garvan, authorised its printing at the Government Printing Office. On the advice of the Principal Librarian of the Free Public Library, R.C. Walker, Anderson Stuart engaged William Thomas Dayton (1854–1934), former manager of the William Dymock’s Book Arcade, to write the work. The response to such a specialised publication in Australian Town and Country was matter of fact: ‘It will be useful to those who have occasion for such a work of reference’, but The Sydney Morning Herald recognised the importance of access that this catalogue could provide: ‘It should be useful as facilitating reference, and making the literature at hand on these subjects readily accessible.’

If there was a model for this publication, the likely candidate is Henry Carrington Bolton’s A Catalogue of Scientific and Technical Periodicals, (1665 to 1882): Together with Chronological Tables and a Library Check-list (1885), published by the Smithsonian Institution only four years previously. The Australian Museum and the University of Sydney both held the work in their libraries at the time, and the new feature of this publication was the appendix, which listed which periodicals were held by a number of different U.S. libraries. Whatever had

---

92 The contributing libraries were: The Australian Museum, Free Public Library, Linnean Society of N.S.W., Observatory, Parliamentary Library, Royal Geographical Society of N.S.W., Royal Society of N.S.W., Technological Museum and the University of Sydney.
95 SMH, 19 September 1889, p. 5.
prompted Anderson Stuart to create this type of catalogue, his work was acknowledged by Thomas Sergeant Hall, Melbourne scientist and Librarian to the Royal Society of Victoria, in the introduction to his *Catalogue of the Scientific and Technical Periodical Literature in the Libraries in Melbourne* (1899). Hall’s work on developing a larger second edition of his union catalogue with librarian Ernest Roland Pitt, in 1911, is considered the antecedent to the *Catalogue of the Scientific and Technical Periodicals in the Libraries of Australia* (1930), produced by Pitt for the Council for Scientific and Industrial Research.

The participation of the Australian Museum in this project marked the beginning of a period of active involvement of its staff in conferences both scientific and library related. The collaborative scientific model—where bibliographic, classificatory and cataloguing conversations were the norm and joint expeditions and specimen and publications exchanges were common—provided a useful setting in which those working in late nineteenth-century museum libraries could engage with this new occupation. Despite Anderson Stuart’s collaborative achievement, a second edition was not compiled and over the next fifteen years there were four attempts to resume the catalogue, during which time the Committee of the Australasian [Library] Association ‘did nothing’ and the AM’s offer of W.A. Rainbow to assist, in 1914, was to no avail. Whereas the Melbourne libraries had managed to combine their efforts twice, the Sydney libraries were once more on their own.

---

99 Anderson Stuart proposed a second edition in 1899 and the AM gave provisional support for the £10 fee waiting for the results of a meeting among librarians of the institutions [AMS 26 Secretary’s Report no. 13, 1899]. In 1901, a meeting was chaired by Anderson Stuart with participating institutions and attended by Etheridge and Sinclair [AMS26 Secretary’s Report no. 6, 1901]. The death of Caleb Hardy, Assistant Librarian at The University of Sydney, had halted progress and another meeting was held in 1904 to regroup [AMS26 Secretary’s Report No. 8, 1904]. Sinclair met with William Ifould, Principal Librarian, Public Library of NSW, to discuss the possibility of the AML and Public Library jointly completing the project. AM Trustees gave permission for the project to be continued with the assistance of William Rainbow [AMS25 General Report no. 4, 1914 and AMS1, Trustee Minutes, 2 October, 1914.] The catalogue was not published.
100 AMS26 Secretary’s Report no. 9, 1914.
This lack of success may have been due in part to the death of Caleb Hardy, Assistant Librarian at the University of Sydney, in 1902, and the later outbreak of war, but perhaps the greatest obstacle was an inconsistency in the level of need for such a catalogue by the participating institutions. The Australian Museum and the PLNSW were still keen to drive the project in 1914 but apparently with little interest from others. Despite this failure, Rainbow was able to report, in 1919, that the AML had participated in a new national project and that staff from the Commonwealth Bureau of Science and Industry had added the Library’s holdings to the *Catalogue of Scientific Serials in Australia.*

The failure to maintain collaborative endeavours in the library world has been most famously exemplified during this period by the efforts to establish and maintain the Library Association of Australasia. Originally formed by the Trustees of the Public Library of Victoria in 1894, it emulated the Library Association of the United Kingdom and the American Library Association in its design. Having held an inaugural conference in Melbourne in 1896, followed by three conferences in Sydney, Melbourne and Adelaide between 1898 and 1902, the Association dissolved. The reasons for its demise have been articulated by a number of scholars and M.R. Talbot points specifically to a lack of cohesion between a membership of various groups which included state Public Libraries, Mechanics’ Institutes and anyone interested in the world of books generally. Talbot did not include special libraries in his discussion, but the Australian Museum was listed as member in 1898 and Sutherland Sinclair contributed both a paper and exhibition items for the Sydney conference in that year. Despite the ultimate failure of the LAA, there were some successes in terms of bringing like-minded people together, including experienced librarians, who discussed issues such as new directions in

---

102 AMS26 Secretary’s Report no. 8, 1904.


cataloguing and classification. While Peter Biskup suggests the technical discussions were irrelevant to many of those working in smaller institute libraries and alienated possible members, it was these very issues that were most pressing for Sutherland Sinclair and his management of the AML’s ever-expanding collection.

The Australian Museum’s participation (and lack of it) in the Association is well documented and began with an ambivalent response from the Trustees to a circular announcing the proposed Association and its first meeting:

> The Trustees are disposed to look on the proposed Library Association of Australasia favourably, but will await the result of the Conference before coming to any decision regarding their relation to it.

The Museum did not formally attend the meeting in Melbourne, but the proceedings were accessioned by the library.

In April 1897, Sinclair was invited to be a Vice President of the Second International Library Conference to be held in London in the following July. He had been asked to contribute a conference paper on Australian libraries, but replied that this was a task for the Public Librarian and, instead, despatched a brief account of the Australian Museum Library. It appears Sinclair had been asked to cover the national library scene because of confusion over the name of his institution. H.C.L. Anderson, the Public Librarian, attended the conference and presented a paper on ‘Library Work in New South Wales’ in which he made mention of the book collections of both the Royal and Linnean Society Libraries.

---


but not that of the Australian Museum.\textsuperscript{109} Anderson’s non mention of the New South Wales government’s largest natural sciences library seems curious, particularly when he stressed the strength of the natural history periodicals in the Society libraries.

If Anderson was snubbing the Museum for some reason, the relationship was to only deteriorate in the following year leading up to preparations for the Sydney Conference of the LAA. In January 1898, the PLNSW had ‘intimated’ that it would no longer lend books to the Australian Museum.\textsuperscript{110} As a likely precaution, the AM and the Royal Society of NSW formed a reciprocal loan agreement in July.\textsuperscript{111} In August, the AM Trustees reviewed the PLNSW’s new lending policy which stipulated that loans were to be limited to one book at a time for one week only. The Trustees asked the PLNSW to reconsider regulations that made it ‘practically useless to ask for loans of books from that Library’\textsuperscript{112} and for the remainder of the year correspondence flowed between the two institutions about the issue. However, the PLNSW remained unmoved.

With this rather testy relationship between the AM and the PLNSW continuing throughout 1898, it was in July that Sinclair prepared a version of his London paper to be presented at the Library Association’s Sydney conference in the following October.\textsuperscript{113} The Sydney Morning Herald reported in August that the Conference would include a special book exhibition in the Great Hall of the University of Sydney, where the relics of Captain James Cook were a featured exhibit.\textsuperscript{114} The Cook Relics had been given to the Australian Museum in 1894 by the New South Wales government, following their purchase in London by the New South Wales Agent General. Whether the Library Association had made an error or


\textsuperscript{110} AMS26 Secretary’s Report no. 1,1898.

\textsuperscript{111} AMS1, Trustee Minutes, 5 July 1898.

\textsuperscript{112} AMS26 Secretary’s Report no. 14, 1898.

\textsuperscript{113} AMS1, Trustee Minutes, 6 July 1898.

\textsuperscript{114} SMH, 20 August 1898, p.9.
just assumed the Museum would lend the material, the AM Trustees refused permission when the application came before them more than a fortnight after the Herald report.\footnote{AMS1, Trustee Minutes, 6 September 1898.} They also refused to lend ‘old books or newspapers’ requested but offered to make the Cook material available for the conference delegates to view at the Museum. They agreed to lend the AML’s ‘cabinet of catalogue cards of the Zurich Bibliographical Council’ for the exhibition.\footnote{AMS6 Outward Letter Books, S. Sinclair to H.C.L. Anderson, 7 September 1898, vol. 23, no. 678, 1898.} H.C.L. Anderson, as Honorary Secretary to the Library Association, asked the Trustees to reconsider their decision;\footnote{AMS6 Outward Letter Books, S. Sinclair to H.C.L. Anderson, 20 September 1898, vol. 23, no. 720, 1898.} he was keen to include in the exhibit a contemporary copy of part of Captain Cook’s log made on the Endeavour,\footnote{Originally donated to the Museum in 1895, this log has since been transferred to the Mitchell Library and has been fully digitised: James Cook: A Journal of the Proceedings of His Majesty’s Bark Endeavour on a voyage round the world, by Lieutenant James Cook, Commander, commencing the 25th of May 1768 - 23 Oct. 1770, ML Safe 1 / 71, retrieved 12 August 2012, <http://acms.sl.nsw.gov.au/item/itemDetailPaged.aspx?itemID=449197#>.} as it complemented a paper Professor E.E. Morris was scheduled to give on Joseph Banks at the conference. Despite the President of the Library Association, Dr James Norton, being a Trustee on both the AM and the PLNSW Boards, the AM refused to budge and the Conference agreed to organise a visit to the Museum after the Conference’s last session to view the relics.\footnote{’Library Association of Australasia: Sydney Meeting, October 4th-7th, 1898’, The Library World, vol. 1, no. 6, 1898, p. 107, retrieved 24 August 2012,<http://dx.doi.org/10.1108/eb008802>.}

The book exhibition was reported to be a glittering affair on the opening evening of the conference.\footnote{SMH, 5 October 1898, p. 6.} Rarities from some of Australia’s leading institutions and private book collectors were there. The Universities of Sydney and Melbourne were there as well as representatives of the Public Libraries of New South Wales and Victoria, The Sydney Mechanic School of Arts and the National Art Gallery of New South Wales. Material was lent by private individuals including David Scott Mitchell, Alfred Lee, and Rose Scott (whose offerings included a Ludwig Leichhardt letter). The Australian Museum was conspicuously absent on the list of exhibitors,
although Sutherland Sinclair provided personal material for display. His seven items, consisting of Scottish, literary and religious texts and a school slate from Eromanga, were clearly not a match for the Cook material refused by the Museum. Yet his exhibits, along with his offer of a paper (which he did not read because the session ran out of time), seemed to reflect a strong personal engagement with the conference.

The AM remained a member of the Association but did participate in subsequent conferences. Etheridge, who had been an individual member in 1898, later displayed antagonism towards the Association while Sinclair remained interested in the contents of its conference Proceedings, particularly papers relating to the conservation and care of book collections. When the Association had first tested the Museum’s level of interest in 1896, the AML had been considering the best classification for its expanding collection. Having decided to subscribe to the card catalogue of the Zurich Bibliographical Council and even offering to exhibit the new system at the Sydney conference, Sinclair was likely to have been interested in the technical papers on offer. Though Sinclair maintained this interest in classification for much of his later career, as evidenced by his purchase of library manuals, by the time of the Adelaide conference in 1900, his immediate concerns had turned to conservation problems in the Library. His chief source for advice on the matter was established international library literature rather than the brief attempts issued by the Library Association.

---

123 AMS9 Letters Received, L:11/00, Library Association of Australia to the Australian Museum, May 1900. Attached to a circular promoting the Association’s Adelaide conference in 1900 is the following exchange of notes between Sinclair and Etheridge: ‘Cannot take part in the Adelaide meeting but there are papers proposed well worth the amount of subscription (10/-) to get the proceedings. S.S. 31–5–1900’; ‘I fail to see that this Association is of the slightest advantage to us - we might as well save our 10/- R.E. 1.6.00’; ‘I think it is certainly worth 10/- to get information on the three subjects I have marked - probably we know it all and more, but others experience is worth hearing. S.S. 1–6–00.’ [Sinclair has marked the following subjects: Binding most suitable for the Australian climate; Preserving periodicals; and Disinfecting books. There are also dots next to ‘Ventilation in public libraries’ and ‘Library fittings and furniture’.]
**Classification**

The conference paper written by Sutherland Sinclair for the Second International Library Conference and revised for the LAA’s Sydney conference in 1898 was a simple, descriptive account of his library and its manuscript catalogue. The general structure of the catalogue had changed little from that which he had first described to the Trustees in 1890:

- **Part I.** An alphabetical list of all the books in the library.
- **Part II.** A more detailed list periodical literature...in alphabetical arrangement of publications under their respective countries.
- **Part III.** Pamphlets, collected in bound volumes.
- **Part IV.** A general subject-index.\(^{124}\)

The breakdown of the classification he provided revealed a continuation of W.A. Haswell’s basic design implemented almost fifteen years earlier. Maintaining continuity was an easy way to keep the relatively under-resourced library running and, where Haswell’s sections had become outdated, changes had been made. For example, ‘Class B. Botany’ had been expanded to ‘Biology’ and included new categories such as ‘embryology’, ‘anthropology’ and ‘ethnology’. Sinclair claimed to have considered ‘all available schemes’, including DDC but none were suitable for ‘a library of limited compass accumulated for a special purpose’.\(^{125}\) Yet the Library’s collection had grown almost three times in size since Sinclair’s employment in 1882 and the ability to undertake detailed subject specific searches of the collection would have been increasingly difficult with the status quo.\(^{126}\) A solution to both sourcing information about the latest zoological publications delivered in a flexible, ever-expanding card system and the possibility of interleaving it into the Library’s current catalogue was offered to Sinclair in mid-1896.\(^{127}\) He had received notice from the Bibliographical Council of Zurich of its

\(^{124}\) Sutherland Sinclair (1898), p. 207.

\(^{125}\) ibid.

\(^{126}\) The Library had grown from 2741 volumes in 1882 to 7429 in 1887.

\(^{127}\) AMS26 Secretary’s Report no. 8, 1896.
new card service, *Concilium Bibliographicum*, also known as the ‘Zurich Cards’, which was available on subscription for £2 per annum.\(^{128}\) The service, established by American zoologist, Herbert H. Field in 1895, under the auspices of the International Congress of Zoology, offered the AML access to the bibliographical details of the latest publications (primarily periodicals) in the biological sciences. Subscribers had the option to purchase individual subdivisions, such as ‘palaeontology’, and while it is uncertain as to how extensive the Museum’s coverage was, it was large enough to offer its cabinet of cards for exhibition at the 1898 Library Association conference. The trustees had agreed to subscribe to a cutting-edge information service and it was worth showing off.

In 1895, the *Concilium* had started collaborating with the *Institut International de Bibliographie*, in Brussels, and a copy of the former’s *Conspectus Methodicus et Alphabeticus Numerorum... (1902)*\(^{129}\) was interleaved by staff at the AML into a specially-bound volume some time before 1911. Bound into the book was a typed title page, ‘Arrangement of Catalogue Cards in the Australian Museum Library’.\(^{130}\) Included was a typed list of subdivisions based on Sinclair’s adaptation of Haswell’s model, but a decimalised classification had been added to the various subdivisions (Figure 41). The 1902 *Conspectus* represented part of the *Concilium*’s contribution towards the International Institute’s development of Universal Decimal Classification\(^{131}\)—a faceted form of classification that provided the opportunity for the detailed cataloguing needed by special libraries focussed on a few subject areas. While UDC continues to be a classification of choice for many special libraries, the Australian Museum Research Library converted the last of its UDC classified collection to standard Dewey in the early 2000s.

---

\(^{128}\) AMS26 Secretary’s Report no. 13, 1896.

\(^{129}\) Concilium Bibliographicum, *Conspectus Methodicus et Alphabeticus Numerorum... Palaeontologia, Biologia Generalis, Microscopia, Zoologia*, 56—57—59, Turici: Concilii Bibliographici, 1902.

\(^{130}\) AMS575/5 Arrangement of Library Catalogue Cards.

By 1911, the AML had created a card catalogue that used multiple resources: including the original Haswell catalogue, joint cards from the *Concilium Bibliographicum* and the *Institut International de Bibliographie* and index cards of scientific American periodicals compiled by the Library of Congress. It was a necessarily ad hoc solution as none of the card systems individually catalogued all the subject areas covered by the AML. This continued to be a frustration and Sinclair asked Dr Charles Anderson, the AM’s Mineralogist, to investigate further classification options at the *Institut International de Bibliographie*, while on a trip to Europe in 1911. The library was keen to know when an English edition of the Manual was to be released and they needed classification cards to fill subject gaps for ‘Ethnology, Geology, Mineralogy, Archaeology (meaning cards relating to Egyptian, Peruvian and other discoveries).’ Most of all, it was interested to know when the ‘proposed new Classification’ (UDC) was to be published. This early interest is put into perspective when considering that the libraries of the Council for Scientific and Industrial Research, the precursor to the CSIRO, did not begin adopting UDC until the late 1930s.

The catalogue compiled for the AML between 1897 and 1911 was more sophisticated than most libraries in Australia and Britain at this time. In Britain in 1900, 87½% of Public Libraries remained unclassified; in 1909 this had dropped 63%, and by 1914 it was down to 33½%. T.S. Hall presented a paper to the LAA conference in Adelaide, summarising his experiences in the hunt for scientific periodicals in 75 Melbourne libraries. His search included public libraries,

---

132 AMS26 Secretary’s Report for 1911.
133 AMS49 Curator’s Private Letter Book, Box no. 6, S. Sinclair to Dr Charles Anderson, 24 March 1911, p. 307.
<table>
<thead>
<tr>
<th>Class</th>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.7</td>
<td>Crustacea, Echinodermata, &amp;c.</td>
<td>59.39</td>
</tr>
<tr>
<td></td>
<td>Echinodermata</td>
<td>.47-49</td>
</tr>
<tr>
<td></td>
<td>Bryozoa, Brachiopoda, Tunicata</td>
<td>.50-51</td>
</tr>
<tr>
<td></td>
<td>Articulata, Vermes, Rotifera</td>
<td>.52</td>
</tr>
<tr>
<td></td>
<td>Arthropoda</td>
<td>.53</td>
</tr>
<tr>
<td>A.8</td>
<td>Lower Invertebrata</td>
<td>.81-83</td>
</tr>
</tbody>
</table>

**CLASS 2. BIOLOGY**

<table>
<thead>
<tr>
<th>Class</th>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.0</td>
<td>General</td>
<td>57.50-90</td>
</tr>
<tr>
<td></td>
<td>(see also A.0, 59.00-01)</td>
<td></td>
</tr>
<tr>
<td>B.1</td>
<td>Botany</td>
<td>58.00</td>
</tr>
<tr>
<td>B.2</td>
<td>Anatomy, &amp;c. (see A.0, 59.11-19)</td>
<td></td>
</tr>
<tr>
<td>B.3</td>
<td>Anthropology</td>
<td>57.20</td>
</tr>
<tr>
<td></td>
<td>Philology</td>
<td>57.20</td>
</tr>
<tr>
<td></td>
<td>Ethnology</td>
<td>40.00</td>
</tr>
<tr>
<td>B.0</td>
<td>General</td>
<td>57.50-70</td>
</tr>
<tr>
<td></td>
<td>Microscopy</td>
<td>.80</td>
</tr>
<tr>
<td></td>
<td>Conservation</td>
<td>.90</td>
</tr>
</tbody>
</table>
educational institutions, societies and government department libraries and the AM’s achievement is cast against this local context:

As a rule, in the libraries, catalogues are non-existent, or else are ancient. The card system has not penetrated far and is viewed with distrust by nearly all, while the book catalogues are of the vicious, unsystematic, amateur type. Owing to the small size of many of the libraries this defect is not of much importance; but a large collection of books heaped anyhow into presses is not a library, but an institution for the promotion of profanity.\footnote{Hall (1901), pp. 69–70.}

Hall’s point about ‘books heaped anyhow’ identifies the second role of a library catalogue: however sophisticated the system to identify literature might have been, the books still needed to be locatable. One Australian librarian had written to Melvil Dewey in the 1890s asking whether his scheme could be applied to shelving the collection as well as cataloguing it.\footnote{Talbot (1984), p. 123.} In a world of fixed book locations, to have movable locations was a novel idea. Movable locations also took up more room and this was often the clincher as free space needs to be maintained within the subject sections to allow for growth. The AML suffered constantly from inadequate space and the introduction of the decimal system in the catalogue was not replicated on the shelves. The location numbers on the catalogue and on the book spines simply denoted a bookcase, shelf letter and book number in the main library and, later, in the scientific sections.

The question then remains who was responsible for the catalogue system at the AML? Was Sutherland Sinclair responsible or can we see the hand of Etheridge, who himself had been Librarian to the Geological Survey of New South Wales,\footnote{Robert Etheridge, \textit{Contributions to a Catalogue of Works}…, Part 2, 1891, p. v.} or university Trustees such as William Haswell, James T. Wilson, Edgeworth David or Archibald Liversidge? Liversidge was certainly involved in the choice of literature for the AML and in his Presidential Address at the Seventh Session of the AAAS, in 1898, he argued strongly for support for the newly formed \textit{International Catalogue}
of Scientific Literature. He noted that the catalogue would be delivered in ‘slips’ or ‘cards’ but that DDC, ‘its merits for the use of librarians not denied’, was ‘not suitable for scientific catalogue purposes’. There is no doubting Liversidge was engaging with these issues around the time of the catalogue’s development and perhaps he and some of his fellow Trustees played an advisory role. However, the lengthy list of books on classification and similar technical questions ordered by Sinclair between 1899 and 1902 suggests that he was instrumental in the process.

Conclusion

Scholars examining Australian library history at the time of Federation have tended to focus on the work and relationships of the large public libraries, the rise of university libraries and activity relating to institute libraries. Little is known about special libraries such as the AML and the methods they employed in maintaining their services. This chapter has revealed preparedness by the AML to participate in new ways of communicating its collection, such as through union catalogues, and improving access to the latest information through the adoption of a card catalogue and the use of international subscription services and indexes.

This chapter also reveals more detail about the individuals working in the AML during this period and their duties and training at a time when there was no access to professional library education. It appears that the Library was used as a training ground for some of the young scientific workers. While there were clear handicaps

---

140 ibid.
in a cadet system that seemed to hamper ready access to university education, there is some evidence that access to the AML’s scientific literature was of educational benefit to the young scientific workers. W.A. Rainbow was the only person during this period to be given the title of ‘Assistant Librarian’ and was clearly trained by Sinclair in an apprenticeship-type system which led him away from a career in science to one in libraries. There is no evidence of Rainbow undertaking any training in library economy at the PLNSW, but his purchase of numerous books on library classification and systems at the time of his appointment to the Assistant position shows that Rainbow was following Sinclair’s model of self tuition.

This study of the training and role of library staff at the AML has revealed some parallels between their working lives and the proto-professional scientific staff at the Museum. Junior staff might be called ‘scientific assistant’ or ‘assistant librarian’ but those more senior staff, still with no university training but often strong ‘field experience’, could be called ‘curator’ or ‘librarian’, and both E.P. Ramsay and Sutherland Sinclair were clearly guided at times by university-trained scientists on the AM Board such as Archibald Liversidge and W.A. Haswell. Despite greater opportunities to gain a university-based scientific education, the Australian Museum was slow to employ professionally-trained scientists, and yet increased specialisation at the Museum and the quality of some of its research output indicates that there was engagement with the changing scientific world. Those in the library had little opportunity for training in their field but Sinclair, in particular, was to demonstrate a more ‘modern’ approach to his work than some of those in the scientific departments and certainly more than many of those working in similar libraries in Australia and overseas.

Sutherland Sinclair’s engagement with the early form of UDC, which then became the library’s standard classification system for at least the next seventy years, appears unprecedented in Australia. It is a complex system that science libraries eagerly adopted to assist in providing a level of classificatory description not available by using DDC. While it is unclear in what ways the adoption of UDC and international subscription services and indexes directly impacted on day-to-day
scientific work at the Museum, it no doubt reflected and supported the growing specialisation of the zoologists, which had been apparent since the 1880s. While there is no clear evidence that the AML’s lead in using UDC was followed by other libraries at such an early stage, such a discovery would, indeed, be a significant find in the history of Australian scientific libraries.

The proposal, in 1836, to provide the Australian Museum’s first Committee of Superintendence with access to scientific literature was certainly creative, if not unique. To suggest that a combined catalogue of the private libraries of the members of the Committee would alleviate the lack of available books and funds appears to have been an Australian solution, first enacted by the Philosophical Society of Australasia in 1821. This mirage of egalitarianism in the penal colony of New South Wales, was, in fact, a colonially pragmatic act deeply rooted in the traditions of London science and of the gentlemen who had been raised within them. Undoubtedly, these traditions were difficult to maintain 12,000 miles from home and the desire to establish a library of scientific literature, even if cobbled together in the form of a union catalogue of private libraries, appears not to have been fulfilled. The cause of this failure has not been identified, but the practicality of listing the scientific titles from Alexander Macleay’s 4,000-volume library, as well as gaining access to his collection, may well have been a contributing factor.

There was a small network of like-minded individuals in New South Wales, many being members of the Linnean Society of London, who were linked to the Australian Museum prior to the development of its library. It is clear that their local access to literature was haphazard and they relied on a variety of sources, sometimes unorthodox, to access material. The supply of natural history books was erratic and expensive and it was not uncommon to see authors in Britain also performing the role of publisher, distributor and bookseller. In New South Wales, some individuals like P.P. King even printed their scientific research at home for limited distribution to friends. The inequality of access to scientific book material is also evident at this time and even George Bennett, the Museum’s first Curator, appears not to have had access to the library of Museum Chairman, Alexander Macleay. A consequence of this lack of access to literature contributed to the local publishing of highly derivative works, like Bennett’s first Museum catalogue. Gerard Krefft, however, demonstrated similar behaviour almost 30 years later, in his mammals catalogue of 1864, and J.D Ogilby complained about this practice.
continuing in the 1890s. While the convenience of copying recent, reputable publications in a busy workplace may have been a factor in the preparation of these catalogues, we can see that Bennett relied on only two published sources, Krefft referenced three books and Ogilby advocated a combination of checking the many bibliographic sources available to him at the AML against actual specimens as well as providing life history data of the species listed. It is clear that the availability of scientific literature at the Museum and the growing impact of biological sciences had affected the content of the publications of those working at the Museum by the end of the nineteenth century.

The overreliance on the private book collections of a group of ‘old Linneans’ and their friends cast the mould in which the Australian Museum Library was formed in the early 1850s, and would not be broken for over thirty years. While the older gentlemen scientists, such as William Sharp Macleay, had their own extensive libraries at this time, those proto-professionals working at the Museum had little access to literature. It took the energy and seniority of Governor Denison, who, despite coming from a similar background to many of those on the Museum Board, was intent on driving scientific improvement wherever he served. While Denison’s role in the progress of the Museum during his tenure in New South Wales has been well recognised, his direct influence in funding and planning the Australian Museum Library was previously unknown. Many of the books purchased from the widow of William Swainson, and those from London with the first endowment secured by Denison, are now considered some of the Library’s greatest treasures, though the circumstances of their acquisition had been forgotten.

The collection of books purchased with the first library endowment contained some of the antiquarian elements one might expect in the library of a London scientific society, but the instructive texts also purchased suggest a training element more common to a young government institution. Many of the older texts acquired were still essential for the classification of specimens and provided an element of increased independence to the Museum staff. The titles purchased by Richard Owen for the AML appear to reflect the aspirations of those in the metropolis for the fledgling institution, with books provided on comparative
anatomy and microscopy, in addition to the standard texts on geology. As it turned out, the expectations were higher, particularly in terms of microscopy, than the Museum’s budget for technical equipment or the skills of its staff would allow.

Yet it was the scientific work of one of the proto-professionals, Gerard Krefft, which has left a significant mark in Australian zoological history. While this thesis has not examined the quality of Krefft’s research, an increased confidence in his classification and greater sophistication in the communication of his work is evident over the years he was employed at the Museum. What has not been considered previously has been Krefft’s access to literature and his use of it at the time of his growing professional confidence. While there were very few markings in books at the AML that could be used as evidence of Krefft’s interaction with texts, there appeared to be a correlation between access to particular publications and his ability to present research and enter scientific debates. At times it was his lack of access to information that was most obvious in the criticism of him in some of the controversies in which he was involved. Of the three case studies examining Krefft’s use of the library, the most significant findings related to his discovery of the Queensland Lungfish and his involvement in the Thylacoleo carnifex debate. In the former, we saw which books were available to Krefft in the AML as he classified his specimen and, more controversially, we have seen Rev. W.B. Clarke’s little-known claim that he identified the species first because of a book he had seen in the AML, to which he later referred Krefft. The battle between Krefft and Richard Owen over the Marsupial Lion has since taken on the proportions of a great evolutionary debate. There appears a strong relationship between the strength of Krefft’s attack on Owen and what relevant material was available to him in the Library. There is also evidence of Krefft purchasing some of the first pro-Darwinian texts for the AML, by Ernst Haeckel, just prior to the Curator’s sacking in 1874.

Many of Krefft’s contributions to scientific debates had taken place in public in the Sydney newspapers. He wrote numerous columns educating the population about Australian animals, fossil discoveries and evolution and yet, like the Trustees, did not appear interested in sharing the AML with those outside the Museum. As the
man responsible for the physical management of the book collection, his motive for this may be obvious, but it was at odds with his desire to communicate science as well as with the repeated demands from the local press to provide access to the library. The closed nature of the Museum’s library harked back to its earliest years as an extension of the private libraries of its gentlemen trustees: similar in form and purpose to those libraries at home and in their scientific clubs in London. The lack of documentation relating to the Library’s use by readers has made it difficult to identify when this policy was relaxed but there appears to have been a gradual increase in access for serious researchers from the 1870s onwards. The publication of the AML catalogue, in 1883, is a significant milestone in the library’s early history in that it not only publicised the Library’s collection but that it reminded the public that a library at the Museum existed at all. C.W. Holgate noted in his brief review of the library in 1884 that it was ‘a scientific library of some value’ and available to staff and students. University-educated zoologist, W.A. Haswell, had arranged a catalogue of some sophistication and which was in keeping with increased specialisation at the Museum and the recent establishment of scientific departments and additional scientific staff.

While Haswell’s catalogue was an achievement in communicating the collection to a broader audience, it was the AML’s participation in a serials union catalogue of Sydney’s scientific collections, in 1889, under the leadership of Museum Secretary, Sutherland Sinclair, which marked the AML’s first collaboration with other libraries. Also the first manager of the library to include the term ‘Librarian’ in his job title, Sinclair’s efforts to engage with the broader library community through local and international conferences, his adoption of an early form of Universal Decimal Classification, and his subscription to international bibliographical services revealed a library of far greater sophistication and a connectedness to international information systems than has previously been documented.

This thesis has mapped the access to information to those on the scientific periphery and also some of the relationships between researchers in the

---

142 Holgate (1886), p. 44.
metropolis and those in Australia. Ties between the Australian Museum and its associates and the scientific centre remained strong over the 80 years covered by the study, but access to information from Australia was increasingly filtered by local scientific workers. The use of photography and plaster casts as specimen surrogates began to separate metropolitan experts from the original specimens. Equally, published information about natural history in Australia was increasingly filtered by local writers, such as Gerard Krefft, and consumed by the local community. Scientists at the Museum in the nineteenth and early twentieth centuries, however, continued to rely heavily on overseas publications and imported information systems. The Museum tended to be an early adopter of communication and information technologies such as photography, in-house printing and the typewriter, and its implementation of a new library classification system, in the early twentieth century, was also part of this trend.

This dissertation’s identification and statistical analysis of the development of the collection at the AML, up until 1883, has provided the most detailed study of the growth and use of a nineteenth-century scientific library in Australia. Not only has the database revealed the rhythm of acquisition, the subject focus, the origin, age and format of material in the early library but it has enabled the rediscovery of books from the libraries of William Swainson, Phillip Parker King, Ludwig Leichhardt and Thomas Horsfield among others, and revealed previously little-known relationships between the Australian Museum and other institutions and individuals. Of equal importance, the database has provided information about what literature was available to Gerard Krefft in the 1860s and ’70s at the Museum and has enabled a new understanding about Krefft’s responses to, and participation in, scientific debate both locally and overseas.

The database study has revealed a close relationship between the scientific interests of the gentleman naturalists on the AM board and the library’s contents. As a consequence, the library’s representation of broader scientific trends appears to have been impeded in some subject areas, such as with the availability of evolutionary texts, but not all. This local influence upon the choice of material for the library was countered to some extent by access to the latest scientific
discussions in the AML’s international periodical subscriptions. Whether and how this material may have been interpreted is more difficult to track. It has been possible, however, to study the effects of the availability of the library’s literature on the work of earlier scientists, like Gerard Krefft, because of the relatively limited number of scientific texts available to him. A similar study of the scientific work of later scientists would require a different approach to accommodate the much greater access to information and the variation in skill levels of those employed at the Museum. This thesis has, however, identified the influence of university scientists on the AML, its collections and its classificatory arrangement from the late 1870s onwards. By the early 1900s, the collections and bibliographical information services of the Australian Museum Library provided its researchers with access to the latest scientific literature. However, whether the level of education of most of the staff at the Museum enabled the benefit of such a collection to be fully realised seems questionable.

Mapping Historical Library Collections

A significant outcome of this work has been the identification, enumeration and contextualisation of three previously ‘lost’ book collections. The largest of these, the pre-1883 AML collection provided important information about the priorities of those forming the collection at the Australian Museum, the methods by which the collection was acquired and stored, and the way in which some of its contents was used. Understanding the early history of this book collection has also revealed the way in which a library could impact on scientific activity both locally and overseas.

The study of the libraries of Ludwig Leichhardt and William Swainson provided more intimate portraits of individuals who had acquired their scientific skills in Europe, often through their books, before emigrating to Australia. Swainson was closely associated with many of the key figures of metropolitan science, including those at the Australian Museum, and his illustrated books were particularly admired. The rediscovery of Leichhardt’s library has proved a worthwhile exercise and elaborated upon our understanding of this complex man and provided insight
into his relationship with his books. The relocation and recataloguing of Leichhardt’s library by the State Library of New South Wales, using the results of this study, has shown how book history can contribute significantly to our understanding of Australian history. Marking the 200th anniversary of the birth of Ludwig Leichhardt, in 2013, this new information is not only timely but is expected to prove particularly useful for planned celebrations of this event.

The ongoing mass-digitisation of older texts around the world has raised the profile of this type of book material. Accompanying this change are the expectations of researchers seeking information to be able to access older books online. While Australian libraries have led the world in the digitisation and delivery of Australian newspapers, relatively few of our older monograph and serial collections have been made available online. The richness of the data sourced from copy-specific information for this thesis has shown how important the physical collections of books held in Australia are to the stories about Australia. While the economic realities may mitigate against the recovery of many of the libraries buried across our institutions in the manner demonstrated here, there is a strong argument for libraries holding significant heritage collections to consider how some of this information can be captured, how it may be connected to similar information held in libraries elsewhere, and how this information is ultimately shared with the Australian community and beyond.
Bibliography

Unpublished Sources

Primary Sources: Archival Material

Australian Museum Archives

Arrangement of Library Catalogue Cards, [c.1900], AMS575/5.

Bennett, George Papers, 1833–1840, AMS37.

Book Invoices and Book purchase Correspondence, 1859–1880, F:10 - F:10.80,
Letters Received, 1853–1883, AMS7.

Book Invoices and Book purchase Correspondence, 1857–1884, F:11 - F:11.80,
Letters Received, 1853–1883, AMS7.

Curators’ Reports to the Trustees, 1881–1918, AMS24

Curators’ Private letter Book, 1875–1919, AMS49

Exchange Schedules, AMS62.

General Reports to the Trustees, 1882–1925, AMS25.

Krefft, Gerard, [Disposition of Gerard Krefft Curator and Secretary of the Australian
Museum, 1874[?]], G.P. Whitley Papers, AMS139/4/78.

Letters Received, 1853–1883, AMS7 and AMS9.

Library Correspondence Letter Books, 1910–1924, AMS107

Minutes of Board of Trustees Meetings, 1836-1966, AMS1.


‘Report of the Committee Appointed to Enquire into the Salaries and Duties of
Employees’, AMS 25 General Reports, no. 4, 1891.

Report on the Leichhardt Collections, 1854, AMA: A:10.54/4, Attached to Curator’s

Secretary’s Report, 1889–1916, AMS26

Australian Museum Research Library
Angas, George French, [Watercolour of Leopard Seal], Newcastle, 1853-1857, AMRL D096/PLA/FOLIO RARE BOOKS(6/2/5).

Other Libraries and Archives

Alexander Turnbull Library, National Library of New Zealand
Philip Parkinson, ‘Research notes on Swainson’s manuscripts and books in various public collections’, fMS-Papers-6292–2.

Ewell Sale Stewart, Academy of Natural Sciences, Philadelphia

British Museum Archives
British Museum Trustees Minutes, C9302, 12 December 1857.
Original Papers, letter 7936, George F. Angas to the Secretary of the British Museum, Natural History Department, 5 August 1857, British Museum Central Archive.

Kenneth Spencer Research Library, University of Kansas.
Gerard Krefft, Canis dingo, watercolour, Gould Drawings, No. 799.

Mitchell Library, State Library of New South Wales

Krefft, Gerard–Papers, ca. 1856–1895, ML A261, A262, A267 and A268.


Leichhardt, Ludwig–Collection, 1832–1846, with associated papers to 1931, 1832–1846, B 818–B 819, C 138–C 163.

Library Council of N.S.W., Council Papers 1900–1912, Minutes of the Trustees of the Public Library of N.S.W., 1902.


Papers relating to the Leichhardt Collection of books at one time in the Museum and now in the Public Library of New South Wales, ML A3938.

Parkes Correspondence, ML A890.


Museum Victoria Archives

'Invoice Book, 17 July 1855 - 12 November 1878' [no assigned series].

Inwards Correspondence, 1857–1939, MVS 12 (OS 02622).

National Museum Committee Minutes, Trustees of the Public Library, Museums and National Gallery of Victoria, MVS 10, 1870–1942.

State Records of New South Wales


Royal Society of London

Certificates of Election and Candidature, GB 117, The Royal Society, 1731–
Royal Society of Tasmania Library, Morris Miller Library, University of Tasmania

Books Issued, 31 January 1852 – 8 April 1897, RSA/G/1.
Letters 1907–1918, RSA/G/2.

Newspapers

*The Argus* (Melbourne)
*Australian Town and Country Journal* (Sydney)
*The Courier* (Hobart)
*The Empire* (Sydney)
*The Sydney Mail*
*The Sydney Morning Herald*

Unpublished Theses


Primary Sources: Books and Printed Material

Australian Museum Publications


______, Annual Reports, 1854–1917.


**Books, Articles and Printed Material**


‘Nomenclature and Classification’, chapter from *Methods of Study in Natural History*, Boston: Ticknor and Fields, 1863.


Australian Subscription Library, Catalogue of the Australian Subscription Library and Reading Rooms, Systematically Arranged, with the Rules, Regulations and By-Laws, and List of Members, Sydney: Printed by James Reading, 1843.


[Blackman, John], *A Catalogue of an Extensive and Valuable Library of Nearly 4000 Volumes ... of Alexander M’Leay,* Sold by Mr Blackman, 1–4 April, Sydney, [1845].

Bladen, F.M., *Historical Notes: Public Library of New South Wales,* Sydney: W. A. Gullick, Govt. Printer, 1911.


British Association, ‘Report of the Committee upon the Provincial Museums of the United Kingdom,’ In *Reports of the British Association for the Advancement of Science,* 1887, p. 119.


Royal Geographical Society of N.S.W., Royal Society of N.S.W., Technological Museum and the University of Sydney, Sydney: C. Potter, Govt. Printer, 1889.


Diggles, S., ‘A Short Account of the Trip to Cape Sidmouth and Back, in the Governor Blackhall.’ *Transactions of the Queensland Philosophical Society*, vol. 1, 1872, p. 2.


Eyre, Edward, *Journals of Expeditions of Discovery into Central Australia and Overland from Adelaide to King George’s Sound in the Years 1840–1*, London: T. and W. Boone, 1845.


Grey, George, *Journals of Two Expeditions of Discovery in North-West and Western Australia during the years 1837, 38, and 39*, London: T. and W. Boone, 1841.


King, Phillip Parker, *Narrative of a Survey of the Intertropical and Western Coasts of Australia: Performed Between the Years 1818 and 1822*, London: John Murray, 1827.


________, *Narrative of the Surveying Voyages of His Majesty’s Ships Adventure and Beagle Between the Years 1826 and 1836*, London: Henry Colburn, 1839.


________, *Two Papers on the Vertebrata of the Lower Murray and Darling, and on the Snakes of Sydney, Read Before the Philosophical Society of New South Wales, 10th September, 1862*, Sydney: Reading & Wellbank, 1865.

________, ‘Dentition of the *Thylacoleo carnifex* (Ow.)’, *Annals and Magazine of Natural History*, 3rd series, vol. 18, 1866, pp. 148–49.


Leichhardt, Ludwig, *Journal of an Overland Expedition in Australia, from Moreton Bay to Port Essington, a Distance of Upwards of 3000 Miles, During the Years 1844–1845*, London: T. & W. Boone, 1847.


Macarthur, William, *Catalogue of Plants Cultivated at Camden, 1843*, [Sydney?: s.n., 1843?]

______, *Catalogue of Plants Cultivated at Camden, 1845*, [Sydney?: s.n., 1845?].


________, *Library Cataloguing*, London: Truslove & Hanson, Ltd, 1913.


Richardson, Ernest Cushing, *Classification: Theoretical and Practical*, New York: Charles Scribner’s Sons, 1901.


[Streatfeild, Thomas] and George Cruikshank, Lympsfield and its Environs: Being a Series of Views, with Descriptions, of that Village and Objects of Interest in its Vicinity, Westerham: Henry George, 1838.

Strong, George, The Catodon Polka. Sydney: G.W. Hudson, [1851?].

Sturt, Charles, *Narrative of an Expedition into Central Australia ... During the Years 1844, 5, and 6*, London: London : T. and W. Boone, 1849.


Threlkeld, Lancelot Edward, *A Key to the Structure of the Aboriginal Language ... Spoken by the Aborigines in the Vicinity of Hunter River, Lake Macquarie, etc., New South Wales: Together with Comparisons of Polynesian and Other Dialects*. Sydney: Printed by Kemp and Fairfax, 1850.


Vigors, N.A. and Thomas Horsfield, ‘A Description of the Australian Birds in the Collection of the Linnean Society; with an Attempt at Arranging them According to their Natural Affinities’, *Transactions of the Linnean Society*, vol. 15, 1827.


**Secondary Sources**

**Books**


Ferguson, Stuart, Rodney Hebels and Charles Sturt University, Riverina, Centre for Information Studies, *Computers for Librarians: An Introduction to Systems and Applications* (2nd ed), Wagga Wagga: Centre for Information Studies, Charles Sturt University, Riverina, 1998.


**Articles and Book Chapters**


Gaimster, David, ‘Sex and Sensibility at the British Museum,’ *History Today*, vol. 50, no. 9, 2000, pp. 10–15.


Inkster, Ian, ‘Scientific Enterprise and the Colonial ’Model’: Observations on Australian Experience in Historical Context’, *Social Studies of Science*, vol. 15, no. 4, 1985, pp. 677–704


Sprod, Dan, ‘Leichhardt’s Second Expedition, 1846-1847. Why did it fail?’, in Heinrich Lamping and Max Linke (eds), *Australia: Studies on the History of"
**Discovery and Exploration**, [Frankfurt/Main]: Im Selbsteverlag des Institutes für Wirtschafts- und Sozialgeographie der Johann Wolfgang Goethe-Universität, 1994, pp. 149–68.


________, ‘Heritage Book Collections in Australian Libraries: What are They, Where are They and Why Should We Care?’ *Australian Library Journal*, vol. 58, no. 2, 2009, pp. 173–89, retrieved 3 January 2013,


**Sound recordings, internet sites, and personal communications**


Appendices
Appendix A: Biographies of Key Players

Anderson, Henry Charles Lennox (1853-1924), public servant and principal librarian of the Free Public Library. H.C.L. Anderson played a leading role in developing the public library in New South Wales and librarianship more broadly through his publication on cataloguing rules, encouraging in-house training for his library staff and his involvement in national and international library conferences.

Angas, George French (1822–86), naturalist and artist. George Angas, a painter by profession, produced three of his most important illustrated works in 1847, including *South Australia Illustrated*. He served as Secretary of the Australian Museum, 1853–1860. He had a particular interest in conchology and his original watercolours of ‘The Nudibranches of Port Jackson’ (c1852) are held by the Australian Museum Research Library.

Barton, George Burnett (1836–1901), lawyer, journalist and historian. In 1866, Barton published *Literature in New South Wales* (with extensive bibliographies) and edited *The Poets and Prose Writers of New South Wales*.

Bennett, Dr George (1804–93), naturalist and physician. A member of the Royal College of Surgeons, George Bennett was a life-long friend of Sir Richard Owen and represented John Gould’s publishing interests in Australia over many years. Visiting Australia twice before settling in Sydney in 1835, he was employed as Curator and Secretary of the Australian Museum between 1835 and 1841. He served on the Museum board 1845–74 and was a member of the AM book committee for most of this period.

Clarke, Rev. William Branwhite (1798–1878), geologist and Anglican clergyman. Clarke served as Secretary and Curator of the Australian Museum, 1841–43. He was a member of the AM board between 1840 and 1874.

Cox, Dr James Charles (1834–1912), medical practitioner. Cox was a Trustee of the Australian Museum from 1865 until his death. He was a member of the Royal, Linnean and Entomological Societies of New South Wales and the Linnean Society of London. Cox’s publications reflected his primary interest in conchology.
Denison, Sir William Thomas (1804–71), engineer, soldier and governor-general. (Sir) William Thomas Denison was Governor of Tasmania 1847–54, Governor of New South Wales 1855-61, and promoted scientific institutions and activity during his gubernatorial service. Denison was a member of the board of the Australian Museum, 1855–60, and arranged book donations for the AM from British institutions and pushed to fund the AML’s initial endowment in 1858.

Etheridge junior, Robert (1846-1920), palaeontologist and museum director. Etheridge was educated at the Royal School of Mines and by his father, Robert Etheridge, palaeontologist to the Geological Survey of England and the British Museum. Working as a geologist and palaeontologist in Britain and at the Geological Survey of Victoria, he was appointed, in 1887, as palaeontologist to the Geological survey of New South Wales and to the Australian Museum. He was Curator of the Australian Museum between 1895 and 1919 and was the author of many publications.

Gould, John (1804–1881), English ornithologist, zoologist and natural history publisher. Gould visited Australia in 1838–40 with his wife, artist Elizabeth Gould, and on his return to England published influential titles on the birds and mammals of Australia. A good friend of Dr George Bennett, who distributed Gould’s titles in Australia for many years, Gould provided Gerard Krefft with an introduction to Bennett prior to Krefft’s application for work at the AM.

Haswell, William Aitcheson (1854-1925), biologist. Initially employed as a demonstrator in comparative anatomy, zoology and histology at the University of Sydney in 1882, he became the first Challis professor of biology in 1890. Haswell was responsible for the arrangement of the Australian Museum Library catalogue and served on the Museum board, 1891–1923.

Hedley, Charles (1862–1926), naturalist and conchologist. In April 1891 Hedley became a scientific assistant at the AM, in 1896 conchologist and in 1908 assistant curator. He published many papers, particularly on molluscs, and donated many antiquarian scientific works to the AML. He resigned from the Museum in 1923.
Horsfield, Thomas (1773–1859), physician and naturalist. Born in Pennsylvania, Horsfield settled in London, in 1819, having spent the previous seventeen years exploring and documenting natural history in Java. He was employed soon after as Curator of the East India Company Museum and worked there for the rest of his life. While Horsfield appeared not to have a direct relationship with the Australian Museum, he had a number of associations with AM staff and trustees and some books from his personal library are held by the AML.

King, Phillip Parker (1791–1856), hydrographer and explorer, was a naval officer whose principal scientific work was hydrographic surveys of the Australian coast. King served on the Committee and Board of the AM, 1836–1856, and his gift of books to the Australian Museum in the mid 1850s encouraged the further development of a library at the Museum.

King, Reverend Robert Lethbridge (1823–97), entomologist and son of P.P. King (above) and a minister of religion. He was a member of the AM Committee 1848–53 and an Elective Trustee 1853–58.

Krefft, (Johann Ludwig) Gerard (1830–81), zoologist and museum curator. Born in Brunswick, Germany, Krefft was naturalist to the Victorian Government Collecting Expedition to northern Victoria under Wilhelm Blandowski 1857–58. Appointed Assistant Curator of the Australian Museum, Sydney 1860–64 and then Curator 1864–74. Best known for his discovery of the Queensland Lungfish, his early work on Australian snakes, his pro-evolutionary stance, and his communication of science to the general public through the popular press.

Leichhardt, (Friedrich Wilhelm) Ludwig (1813–48?), German naturalist and explorer who arrived in New South Wales in 1842 to carry out inland explorations of Australia. He was the first European to lead a successful overland expedition from Derby, Queensland to Darwin, Northern Territory, 1844–5. Leichhardt died on his third expedition attempting to cross the continent from Moreton Bay to Swan River. He had relationships with a number of AM associates and his personal possessions, including his library, were accepted by the Museum for safe-keeping in 1853.
Liversidge, Archibald (1846–1927), Professor of Geology and Mineralogy, University of Sydney 1874–91 and Professor of Chemistry 1891-1907. He served on the Committee of Management of the Technological, Industrial and Sanitary Museum, Sydney 1880-89 and was a key figure in the establishment of the Australasian Association for the Advancement of Science in 1887. He was a member of the AM Board 1874–1907 and was involved in the choice of material for the AML and possibly contributed to discussions about its choice of classification system.

Macarthur, William (1800–82), horticulturalist and agriculturalist with a keen interest in botany. He studied in England from 1809 to 1817, then returned to his family's Australian property at Camden. He was a member of the New South Wales Legislative Council from 1849 to 1855, and then was appointed Commissioner for the Paris Exhibition. He served on the Committee and Board of the AM, 1836–70.

Macleay, Alexander (1767–1848), public servant and entomologist. Founding member of the Linnean Society of London and Colonial Secretary of New South Wales. Founder of the Australian Museum and Chairman of its management committee. Macleay arrived in Australia in 1826 with one of the best private entomological specimen collections in Europe and a large scientific library. He was the father of William Sharp Macleay and George Macleay, and he was the uncle of William John Macleay.

Macleay, George (1809–91), explorer, pastoralist, naturalist and son of Alexander Macleay. (Sir) George, a colonial landowner and sometime scientist, travelled with Charles Sturt on his expedition to the Murrumbidgee and the Murray rivers in 1829. He worked on the fossil mammals of Australia and served on the AM Committee and Board, 1836–59. He assisted with the purchase of books for the AML from the first endowment in 1859.

Macleay, William John (1820–91), pastoralist, politician, patron of science and nephew of Alexander Macleay. (Sir) William was the founder of the Macleay Museum, University of Sydney, and helped to found the Entomological Society of New South Wales. He wrote widely on entomology, ichthyology and zoology. He served on the AM Board 1861–77.
Macleay, William Sharp (1792–1865), naturalist and entomologist, was most celebrated in England in the 1820s and ‘30s as the creator of the Quinary System. He was best known for his publication *Horae Entomologicae* and had a number of followers of his natural system of zoological classification, such as William Swainson and Thomas Horsfield, before it was finally discredited in the early 1840s. He emigrated to New South Wales in 1839 and was considered the leading gentleman scientist in the colony following the death of his father, Alexander Macleay, in 1848. He served on the AM Committee and Board 1840–1862 and was highly influential in museum matters.

McCoy, Frederick (1817–99), palaeontologist and naturalist, was Professor of Natural Sciences, University of Melbourne 1854-1899, Director of the National Museum of Victoria from 1858 and President of the Royal Society of Victoria, 1864. He employed Gerard Krefft in the late 1850s, was in frequent correspondence with the AM and developed a museum library unrivalled by others until the 1880s.

McCulloch, Allan (1885–1925), ichthyologist and entomologist. Regarded as one of the most accurate and talented systemic ichthyologists of his time, he had joined the Australian Museum as a volunteer at the age of thirteen and eventually became the head of the vertebrates section in 1906. McCulloch was also a talented photographer and draughtsman who contributed illustrations to several publications, and was relied on by ex-museum staff who had left Sydney to supply transcriptions of periodical literature held at the AML.

Murchison, Roderick (Sir) (1792–1871), geologist and geographer. Director-general of the British Geological Survey and director of the Royal School of Mines and the Museum of Practical Geology from 1855 onwards, this friend of William Denison contributed some of the earliest institutional donations to the AML in the late 1850s.

Nicholson, Charles (1808–1903), statesman, scholar and physician. A strong supporter of the AM in its early years, he agitated for a permanent home for the Museum in the early 1840s and made a large donation of plaster casts of
classical statuary later in the decade. He served on the AM Committee and Board 1840–62.

Ogilby, James Douglas (1853–1925), Irish-born Ichthyologist, joined the AM in 1885. He wrote a number of catalogues and numerous papers on fish during his tenure at the Museum and after his move to the Queensland Museum, in 1903.

Owen, Sir Richard (1804–92), comparative anatomist and palaeontologist, was the first Hunterian Professor of Comparative Anatomy and Physiology, Royal College of Surgeons, London 1836–56. He did pioneer work on parthenogenesis and opposed Darwin’s theory of evolution by natural selection. He dedicated significant time to both the fauna and fossils of Australia and relied on a good supply of specimen material from the Australian Museum and its associates. Owen had a strong relationship with members of the AM Board, particularly George Bennett, and he sent copies of many of his publications to the AML. He also purchased numerous titles on behalf of the AML in London with the library endowment, in 1861. He had a vigorous debate with Gerard Krefft and others in the scientific press about the nature of the *Thylacoleo carnifex* in the 1860s and ’70s.

Pittard, Simon Rood (1821–61), physician and curator, was trained at the College of Surgeons under Richard Owen, assisted in setting up the Histological Department at the Hunterian Museum, and was employed as a health officer in St. George’s-in-the-East and a teacher of practical anatomy at the Grosvenor Place School of Medicine. Pittard was appointed as the Australian Museum’s Secretary and Curator, in 1860, on the recommendation of Owen. He delivered a series of publicly well-received lectures at the Museum before his untimely death of consumption at the age of 40.

Rainbow, William Alfred (1886–1958), librarian at the Australian Museum and Mayor of Holroyd Council. Born at Marrickville, Sydney, Rainbow was the son of the Museum’s entomologist, William Joseph Rainbow. First employed as a Mechanical Assistant in 1902, Rainbow was assigned to the Mineralogist prior to his transfer to the Library in 1903. In July 1906, he was promoted to the position of Library Assistant and Junior Clerk and then
Assistant Librarian, in 1910. He became librarian upon the death of Sutherland Sinclair in 1917 and retired in 1951.

Ramsay, Edward Pierson (1842–1916), Australian-born ornithologist, zoologist and Curator of the Australian Museum. Ramsay replaced Gerard Krefft as Curator following his dismissal in 1874 and managed the Museum during a period of predominantly strong funding and the growth of scientific staff. He was a strong supporter of the AML and was involved in the purchase of book material. He retired as Curator in 1894.

Scott, Alexander Walker (1800-1883), entomologist and entrepreneur, he was the author of a number of publications of which his most celebrated was *Australian Lepidoptera and their Transformations*. The book was illustrated by his daughters, Helena and Harriett Scott. The Scott's property, Ash Island, near Newcastle, was visited by Ludwig Leichhardt and William Swainson and the Scott sisters' highly accomplished lithographic illustrations were used by Gerard Krefft in a number of his publications.

Sinclair, Sutherland (1851–1917), Australian Museum Secretary and Librarian. Born in Scotland, Sinclair pursued a mercantile career until his appointment as Australian Museum Secretary in 1882. Also responsible for the AML, it was not until 1886 that Sinclair appeared to engage more deeply with the Library’s management following a visit to Britain and a tour of museums there. Keen to see the Library's card catalogue released in a published form, he was thwarted by financial constraints. Sinclair oversaw the design and installation of the new library space in 1892 and contributed a paper on the library to both Australian and English library conferences in the late 1890s. Sinclair adopted the Universal Decimal Classification Scheme in the early 1900s at the AML and preceded other Australian libraries by decades.

Swainson, William (1789–1855), English zoologist and natural history artist. An ardent follower of W.S. Macleay's Quinary System, Swainson wrote numerous books on natural history and extolled the virtues of this classification system. A victim of his own dogmatism, his ideas were eventually rejected by the scientific establishment and Swainson moved to New Zealand in 1840. He visited the eastern colonies of Australia in the
early 1850s. A small but rich collection of his library was purchased from his widow by the Australian Museum in 1858.

Thompson, John Vaughan (1778–1847), surgeon and naturalist, was district medical officer in Cork, Ireland, 1816–35. Thompson discovered metamorphosis in barnacles and his studies in marine biology revolutionized some aspects of zoological thought. Following his move to Australia, he was in charge of the convict medical department, Sydney, 1835–47 and served on the AM Committee between 1836 and 1843. A few volumes from his library were donated to the AML some years after his death.

Thomson, Sir Edward Deas (1800-1879), Scottish-born public servant and parliamentarian, he replaced Alexander Macleay as Colonial Secretary in 1837. He had a long association with the Australian Museum and served on its Committee and Board between 1836 and 1872.

Turner, Reverend George Edward (1810–1869) was a member of the Committee and Board of the Australian Museum 1847–69 and friend and supporter of Gerard Krefft. Interested in horticulture and Botany, it is believed he was also an ardent microscopist.

Wall, William Sheridan (1815–76) was engaged as a naturalist with the Australian Museum in c1842 and was subsequently curator 1845-59. He published natural history articles in the *Illustrated Sydney News* during the 1850s and retired in 1859.

Witt, George (1804–1869), physician, Mayor of Bedford and Secretary to the Australian Museum. Witt emigrated to Sydney in 1850 and set up a medical practice there. Between 1852 and 1853, he served on the Museum’s Committee of Superintendence and was Museum Secretary for part of 1853. Making his fortune through banking and speculation, Witt returned to England in 1854 with his family and was financially secure enough to embark on the passion for which he is best remembered—the scholarly study of phallicism. The first book donation inscribed ‘To the Library of the Australian Museum’ was made by Witt in 1852.
## Appendix B: Members of the Museum Committee and Board and their Affiliations, 1836–1853

<table>
<thead>
<tr>
<th>1836</th>
<th>1837</th>
<th>1838</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sir J. Jamison</td>
<td>Rear-Adm Hon P.P. King</td>
<td>Rear-Adm Hon P.P. King</td>
</tr>
<tr>
<td></td>
<td>429</td>
<td>2, 3, 4</td>
</tr>
<tr>
<td></td>
<td>Rear-Adm Hon P.P. King</td>
<td>§+Hon A. Macleay</td>
</tr>
<tr>
<td></td>
<td>2, 3, 4</td>
<td>3, 4</td>
</tr>
<tr>
<td>Sir W. Macarthur</td>
<td>Sir G. Macleay</td>
<td>Sir G. Macleay</td>
</tr>
<tr>
<td>§+Hon A. Macleay</td>
<td>Sir E. Deas Thomson</td>
<td>Sir E. Deas Thomson</td>
</tr>
<tr>
<td>Sir G. Macleay</td>
<td>R.A. Waugh</td>
<td>R.A. Waugh</td>
</tr>
<tr>
<td>G. Porter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capt C. Sturt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr J.V. Thompson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sir E. Deas Thomson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.A. Waugh</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1839</th>
<th>1840</th>
<th>1841</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear-Adm Hon P.P. King</td>
<td>Rev W.B. Clarke</td>
<td>Rev W.B. Clarke</td>
</tr>
<tr>
<td>§+Hon A. Macleay</td>
<td>Rear-Adm Hon P.P. King</td>
<td>Rear-Adm Hon P.P. King</td>
</tr>
<tr>
<td>Sir G. Macleay</td>
<td>§+Hon A. Macleay</td>
<td>§+Hon A. Macleay</td>
</tr>
<tr>
<td>Sir E. Deas Thomson</td>
<td>Sir G. Macleay</td>
<td>Sir G. Macleay</td>
</tr>
<tr>
<td>R.A. Waugh</td>
<td>W.S. Macleay</td>
<td>W.S. Macleay</td>
</tr>
<tr>
<td></td>
<td>+Sir C. Nicholson</td>
<td>+Sir C. Nicholson</td>
</tr>
<tr>
<td></td>
<td>Sir E. Deas Thomson</td>
<td>Sir E. Deas Thomson</td>
</tr>
<tr>
<td></td>
<td>R.A. Waugh</td>
<td>R.A. Waugh</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1842</th>
<th>1843</th>
<th>1844</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rev W.B. Clarke</td>
<td>+Rev W.B. Clarke</td>
<td>+Rev W.B. Clarke</td>
</tr>
<tr>
<td>Rear-Adm Hon P.P. King</td>
<td>Rear-Adm Hon P.P. King</td>
<td>Rear-Adm Hon P.P. King</td>
</tr>
<tr>
<td>Sir W. Macarthur</td>
<td>Sir W. Macarthur</td>
<td>Sir W. Macarthur</td>
</tr>
<tr>
<td>§+Hon A. Macleay</td>
<td>§+Hon A. Macleay</td>
<td>§+Hon A. Macleay</td>
</tr>
<tr>
<td>Sir G. Macleay</td>
<td>Sir G. Macleay</td>
<td>Sir G. Macleay</td>
</tr>
<tr>
<td>W.S. Macleay</td>
<td>W.S. Macleay</td>
<td>W.S. Macleay</td>
</tr>
<tr>
<td>Dr J.V. Thompson</td>
<td>Dr J.V. Thompson</td>
<td>Sir E. Deas Thomson</td>
</tr>
<tr>
<td>Sir E. Deas Thomson</td>
<td>Sir E. Deas Thomson</td>
<td></td>
</tr>
<tr>
<td>R.A. Waugh</td>
<td>R.A. Waugh</td>
<td></td>
</tr>
<tr>
<td>1845</td>
<td>1846</td>
<td>1847</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>+#G. Bennett 2, 4</td>
<td>+#G. Bennett 2, 4</td>
<td>+#G. Bennett 2, 4</td>
</tr>
<tr>
<td>Rev W.B. Clarke</td>
<td>Rev W.B. Clarke</td>
<td>+Rev W.B. Clarke</td>
</tr>
<tr>
<td>Dr Dawson</td>
<td>Dr Dawson</td>
<td>Dr Dawson</td>
</tr>
<tr>
<td>Rear-Adm Hon P.P. King 2, 3, 4</td>
<td>Rear-Adm Hon P.P. King 2, 3, 4</td>
<td>Rear-Adm Hon P.P. King 2, 3, 4</td>
</tr>
<tr>
<td>M.W. Lewis 1</td>
<td>M.W. Lewis 1</td>
<td>M.W. Lewis 1</td>
</tr>
<tr>
<td>Lt R. Lynd 2</td>
<td>Lt R. Lynd 2</td>
<td>Lt R. Lynd</td>
</tr>
<tr>
<td>Sir W. Macarthur 2</td>
<td>Sir W. Macarthur 2</td>
<td>Sir W. Macarthur 2</td>
</tr>
<tr>
<td>§+Hon A. Macleay 1, 3, 4</td>
<td>§+Hon A. Macleay 1, 3, 4</td>
<td>§+Hon A. Macleay 1, 3, 4</td>
</tr>
<tr>
<td>Sir G. Macleay 1</td>
<td>Sir G. Macleay 1</td>
<td>Sir G. Macleay 1</td>
</tr>
<tr>
<td>W.S. Macleay 4, 6, 7</td>
<td>W.S. Macleay 4, 6, 7</td>
<td>W.S. Macleay 4, 6, 7</td>
</tr>
<tr>
<td>+Hon J. Mitchell 1</td>
<td>+Hon J. Mitchell 1</td>
<td>+Hon J. Mitchell 1</td>
</tr>
<tr>
<td>+Sir C. Nicholson 1</td>
<td>+Sir C. Nicholson 1</td>
<td>+Sir C. Nicholson 1</td>
</tr>
<tr>
<td>Sir E. Deas Thomson 1, 4</td>
<td>Sir E. Deas Thomson 1, 4</td>
<td>Sir E. Deas Thomson 1, 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1848</th>
<th>1849</th>
<th>1850</th>
</tr>
</thead>
<tbody>
<tr>
<td>+#G. Bennett 2, 4</td>
<td>Maj Baddely</td>
<td>#G. Bennett 2, 4</td>
</tr>
<tr>
<td>Mr J.C. Bidwell</td>
<td>Col. Barney</td>
<td>Mr J.C. Bidwell</td>
</tr>
<tr>
<td>+Rev W.B. Clarke</td>
<td>+#G. Bennett 2, 4</td>
<td>+Rev W.B. Clarke</td>
</tr>
<tr>
<td>Dr Dawson</td>
<td>Mr J.C. Bidwell</td>
<td>Dr L. Hartwell</td>
</tr>
<tr>
<td>Dr L. Hartwell</td>
<td>+Rev W.B. Clarke</td>
<td>Rear-Adm Hon P.P. King 2, 3, 4</td>
</tr>
<tr>
<td>Rear-Adm Hon P.P. King 2, 3, 4</td>
<td>Dr L. Hartwell</td>
<td>Rev R.L. King</td>
</tr>
<tr>
<td>Rev R.L. King</td>
<td>Rear-Adm Hon P.P. King 2, 3, 4</td>
<td>Sir W. Macarthur 2</td>
</tr>
<tr>
<td>M.W. Lewis</td>
<td>Rev R.L. King</td>
<td>Sir G. Macleay 1</td>
</tr>
<tr>
<td>Sir W. Macarthur 2</td>
<td>M.W. Lewis</td>
<td>+W.S. Macleay (Chair) 4, 6, 7</td>
</tr>
<tr>
<td>§+Hon A. Macleay 1, 3, 4</td>
<td>Sir W. Macarthur 2</td>
<td>+Hon J. Mitchell 1</td>
</tr>
<tr>
<td>Sir G. Macleay 1</td>
<td>Sir G. Macleay 1</td>
<td>+Sir C. Nicholson 1</td>
</tr>
<tr>
<td>W.S. Macleay 2, 4, 6, 7</td>
<td>§+#W.S. Macleay 4, 6, 7</td>
<td>Dr A.E. Shanks</td>
</tr>
<tr>
<td>+Hon J. Mitchell 1</td>
<td>+Hon J. Mitchell 1</td>
<td>+Sir E. Deas Thomson 1, 4</td>
</tr>
<tr>
<td>+Sir C. Nicholson 1</td>
<td>+Sir C. Nicholson 1</td>
<td>Rev G.E. Turner 1</td>
</tr>
<tr>
<td>Dr A.E. Shanks</td>
<td>Dr A.E. Shanks</td>
<td></td>
</tr>
<tr>
<td>Sir E. Deas Thomson 1, 4</td>
<td>+Sir E. Deas Thomson 1, 4</td>
<td></td>
</tr>
<tr>
<td>Rev G.E. Turner 1</td>
<td>#Rev G.E. Turner 1</td>
<td></td>
</tr>
<tr>
<td>1851</td>
<td>1852</td>
<td>1853</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>#G. Bennett 2, 4</td>
<td>#G. Bennett 2, 4</td>
<td>Dr A.M. A'Beckett</td>
</tr>
<tr>
<td>Mr J.C. Bidwell</td>
<td>Dr A.M. A'Beckett</td>
<td>+G. Bennett 2, 4, 6</td>
</tr>
<tr>
<td>E.T. Blackett</td>
<td>Mr J.C. Bidwell</td>
<td>Mr J.C. Bidwell</td>
</tr>
<tr>
<td>+Rev W.B. Clarke</td>
<td>E.T. Blackett</td>
<td>E.T. Blackett</td>
</tr>
<tr>
<td>Dr L. Hartwell</td>
<td>Rev W.B. Clarke</td>
<td>Rev W.B. Clarke</td>
</tr>
<tr>
<td>+Rear-Adm Hon P.P. King 2, 3, 4</td>
<td>Dr L. Hartwell</td>
<td>O. Darvall</td>
</tr>
<tr>
<td>Rev R.L. King</td>
<td>+Rear-Adm Hon P.P. King 2, 3, 4</td>
<td>Lt-Col J.G.N. Gibbes</td>
</tr>
<tr>
<td>Sir W. Macarthur 2</td>
<td>Rev R.L. King</td>
<td>Rear-Adm Hon P.P. King 2, 3, 4</td>
</tr>
<tr>
<td>Sir G. Macleay 1</td>
<td>Sir W. Macarthur 2</td>
<td>Rev R.L. King</td>
</tr>
<tr>
<td>§+W.S. Macleay 4, 6, 7</td>
<td>Sir G. Macleay 1</td>
<td>Sir W. Macarthur 2</td>
</tr>
<tr>
<td>+Hon J. Mitchell 1</td>
<td>§+W.S. Macleay 4, 6, 7</td>
<td>Sir G. Macleay 1</td>
</tr>
<tr>
<td>+^Sir C. Nicholson 1</td>
<td>+Hon J. Mitchell 1</td>
<td>§+W.S. Macleay 4, 6, 7</td>
</tr>
<tr>
<td>Dr A.E. Shanks</td>
<td>+^Sir C. Nicholson 1</td>
<td>+Hon J. Mitchell 1</td>
</tr>
<tr>
<td>+Sir E. Deas Thomson 1, 4</td>
<td>^Prof J. Smith</td>
<td>+^Sir C. Nicholson 1</td>
</tr>
<tr>
<td>Rev G.E. Turner 1</td>
<td>+Sir E. Deas Thomson 1, 4</td>
<td>^Prof J. Smith</td>
</tr>
<tr>
<td></td>
<td>Rev G.E. Turner 1</td>
<td>+Sir E. Deas Thomson 1, 4</td>
</tr>
<tr>
<td></td>
<td>Dr G. Witt 3</td>
<td>Rev G.E. Turner 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr G. Witt 3</td>
</tr>
</tbody>
</table>

**KEY**

§ Chairman

**Local Affiliation**

+ Australian Subscription Library Committee

# AM Book Committee

^ Sydney University affiliation

**Metropolitan Affiliation**


3 Fellow of the Royal Society of London


5 Wernerian Natural History Society of Edinburgh

6 Zoological Society of London

7 British Association for the Advancement of Science

Table constructed using Strahan *Rare and Curious*;

George Bennett commencement date, SMH 25 June 1845, p. 4

W.S. Macleay participation dates from Holland 1996
Appendix C: The Natural History Library of Alexander Macleay, Sold by Mr Blackman, 1845—Scientific Works

A Catalogue of an Extensive and Valuable Library of Nearly 4000 Volumes...Comprising the Major Part of the Well-Selected Library of Alexander Macleay. Which will be Sold by Auction by, Mr Blackman, at his rooms, 489, George Street, On Tuesday, 1st, Wednesday, 2nd, Thursday, 3rd, and Friday 4th Days of April, Sydney: Welch, Printer, [1845]. ML DSM/018.2/PA1.

NB. Titles which also appear in the Catalogue of the Library of the Linnean Society of London (1827) are shaded in grey.

This is a transcription of sections of the short title catalogue pertinent to this study only. Original spelling and use of diacritics have been retained.

<table>
<thead>
<tr>
<th>Lot</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>131</td>
<td>Stewart’s Elements of Natural History, 2 vols.</td>
</tr>
<tr>
<td>132</td>
<td>Anatomie Comparée des Animaux Articulées.</td>
</tr>
<tr>
<td>133</td>
<td>Considerationes Generales sur l’Anatomie Comp.</td>
</tr>
<tr>
<td>134</td>
<td>Linnaean Society Transactions, 19 vols., 2 last vols unbound.</td>
</tr>
<tr>
<td>137</td>
<td>Zoological Journal, 3 vols., and 5 numbers do. unbound.</td>
</tr>
<tr>
<td>138</td>
<td>Zoological Society’s Transactions.</td>
</tr>
<tr>
<td>139</td>
<td>Annals of Natural History, 11 vols.</td>
</tr>
<tr>
<td>140</td>
<td>Annales des Sciences Naturalles [sic], 30 vols.</td>
</tr>
<tr>
<td>142</td>
<td>Reveu [sic] Bibliographique pour servir le Complement aux Annales, &amp;c.</td>
</tr>
<tr>
<td>143</td>
<td>Bulletin des Sciences Naturelles, 20 vols.. and 3 Nos. unbound.</td>
</tr>
<tr>
<td>144</td>
<td>Dictionnaire d’Histoire Naturelle, 24 vols.</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
</tr>
<tr>
<td>146</td>
<td>Annales des Sciences, Zoologie, 5 vols.</td>
</tr>
<tr>
<td>147</td>
<td>Loudon's Mag. of Nat. Hist., 1 vol., and 1 unbound.</td>
</tr>
<tr>
<td>148</td>
<td>Journal de Physique, 1 vol.</td>
</tr>
<tr>
<td>149</td>
<td>Annales de Physique, 3 vols.</td>
</tr>
<tr>
<td>150</td>
<td>Popular Phisiology <em>[sic]</em></td>
</tr>
<tr>
<td>151</td>
<td>Good's Book of Nature</td>
</tr>
<tr>
<td>152</td>
<td>Hill's Natural History</td>
</tr>
<tr>
<td>153</td>
<td>Cuvier's Regne Animals, 4 vols.</td>
</tr>
<tr>
<td>154</td>
<td>Linnaei Systema Naturae, 4 vols.</td>
</tr>
<tr>
<td>155</td>
<td>Linnaei Systema Nat. curâ Gmelin, 9 vols.</td>
</tr>
<tr>
<td>156</td>
<td>Linnaeus' Natural System, by Turton, 7 vols.</td>
</tr>
<tr>
<td>157</td>
<td>Buffon's Natural History, 6 vols.</td>
</tr>
<tr>
<td>159</td>
<td>Museum Regalis Societatis</td>
</tr>
<tr>
<td>160</td>
<td>Menageries, Library of Entertaining Knowledge</td>
</tr>
<tr>
<td>161</td>
<td>Portland Museum</td>
</tr>
<tr>
<td>162</td>
<td>Horsfield's Zoological Researches in Java</td>
</tr>
<tr>
<td>163</td>
<td>Low's Fauna Orcadensis</td>
</tr>
<tr>
<td>164</td>
<td>Linnaei Fauna Suecica</td>
</tr>
<tr>
<td>165</td>
<td>Paykul Fauna Suecica, 3 vols.</td>
</tr>
<tr>
<td>166</td>
<td>Humboldt et Bonpland Zoologie de la Voyage, 2 vols.</td>
</tr>
<tr>
<td>167</td>
<td>Guiana, Nat. Hist. of</td>
</tr>
<tr>
<td>168</td>
<td>Histoire Nat. d'Espagne</td>
</tr>
<tr>
<td>169</td>
<td>Borlase's Nat. Hist. of Cornwall</td>
</tr>
<tr>
<td>170</td>
<td>Three Hundred Animals</td>
</tr>
<tr>
<td>171</td>
<td>Journal of a Naturalist</td>
</tr>
<tr>
<td>172</td>
<td>Naturalist's Companion</td>
</tr>
<tr>
<td>173</td>
<td>Bingley's Animal Biography, 4 vols.</td>
</tr>
<tr>
<td>174</td>
<td>Spallanzani Opuscules de Physique</td>
</tr>
<tr>
<td>175</td>
<td>Edwards’ Natural Hist., 4 vols.</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>176</td>
<td>Brown's Illustration of Zoology</td>
</tr>
<tr>
<td>177</td>
<td>Donovan's Naturalist's Repository, 3 vols.</td>
</tr>
<tr>
<td>178</td>
<td>Sowerby's British Miscellany</td>
</tr>
<tr>
<td>179</td>
<td>Leach's Zoological Miscellany</td>
</tr>
<tr>
<td>181</td>
<td>Haworth's Miscellany</td>
</tr>
<tr>
<td>182</td>
<td>Pennant's British Zoology, 4 vols.</td>
</tr>
<tr>
<td>183</td>
<td>Wood's Zoography, 3 vols.</td>
</tr>
<tr>
<td>184</td>
<td>Shaw and Nodder's Naturalist Miscellany, 11 vols.</td>
</tr>
<tr>
<td>185</td>
<td>Shaw's General Zoology, 24 vols. [sic]</td>
</tr>
<tr>
<td>186</td>
<td>Selections of the Correspondence of Linnaeus, &amp;c., 2 vols.</td>
</tr>
<tr>
<td>187</td>
<td>Scopoli Historia Naturalis</td>
</tr>
<tr>
<td>188</td>
<td>Gould's Birds of Australia, 10 numbers</td>
</tr>
<tr>
<td>189</td>
<td>Latham's Synopsis of Birds and Supplement, 7 vols.</td>
</tr>
<tr>
<td>190</td>
<td>Latham's Index Ornithologicus, 2 vols.</td>
</tr>
<tr>
<td>191</td>
<td>Latham's Index Ornithologicus and Supplement</td>
</tr>
<tr>
<td>192</td>
<td>Donovan's British Birds, 2 vols. systematically arranged, and 5 vols. unbound</td>
</tr>
<tr>
<td>193</td>
<td>Montagu's British Birds, 2 vols.</td>
</tr>
<tr>
<td>194</td>
<td>Raii Synopsis Avium</td>
</tr>
<tr>
<td>195</td>
<td>Garnet's Lectures on Zoonomia</td>
</tr>
<tr>
<td>196</td>
<td>Raii Synopsis Methodica Animalium</td>
</tr>
<tr>
<td>197</td>
<td>Edwards' Essay on Nat. History</td>
</tr>
<tr>
<td>198</td>
<td>Towson's Tracts Nat. History</td>
</tr>
<tr>
<td>199</td>
<td>Lessons on Objects</td>
</tr>
<tr>
<td>200</td>
<td>Redi, Experimenta circa varias res Naturales</td>
</tr>
<tr>
<td>201</td>
<td>Lamarck Philosophie Zoologique, 2 vols.</td>
</tr>
<tr>
<td>202</td>
<td>Blumenbach de Generis Humani Varietate</td>
</tr>
<tr>
<td>203</td>
<td>Pennant's Quadrupeds, 2 vols.</td>
</tr>
<tr>
<td>204</td>
<td>Catalogue of Mammalia in Museum of Zoological Soc.</td>
</tr>
<tr>
<td>206</td>
<td>Pulteney's Views of the Life of Linnaeus</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>207</td>
<td>Brisson Ornithologie, 6 vols.</td>
</tr>
<tr>
<td>208</td>
<td>Willoughbeii Ornithologia</td>
</tr>
<tr>
<td>209</td>
<td>Ornithological Plates, French to do.</td>
</tr>
<tr>
<td>210</td>
<td>Lewins Birds of New Holland, original coloured plates</td>
</tr>
<tr>
<td>211</td>
<td>Stanley on Birds, 2 vols.</td>
</tr>
<tr>
<td>212</td>
<td>Temminck's Manuel d'Ornithologie, 2 vols.</td>
</tr>
<tr>
<td>213</td>
<td>Savigny Histoire Nat. et Mythologique de l'Ibis</td>
</tr>
<tr>
<td>214</td>
<td>Donovan's British fishes systematically arranged, 2 vols.</td>
</tr>
<tr>
<td>215</td>
<td>Risso Ichthyologie de Nice</td>
</tr>
<tr>
<td>216</td>
<td>Dodd's Essay on the Nat. Hist. of the Herring</td>
</tr>
<tr>
<td>219</td>
<td>Latreille Histoire des Salamandres</td>
</tr>
<tr>
<td>220</td>
<td>Goedart Histoire des Insectes, 3 vols.</td>
</tr>
<tr>
<td>221</td>
<td>Olivier Entomologie, 8 vols.</td>
</tr>
<tr>
<td>222</td>
<td>De Geer Histoire des Insectes, 8 vols.</td>
</tr>
<tr>
<td>223</td>
<td>Reaumur Histoire des Insectes, 6 vols.</td>
</tr>
<tr>
<td>224</td>
<td>Geoffroi Histoire des Insectes, 2 vols.</td>
</tr>
<tr>
<td>226</td>
<td>Fabricii Systema Entomologistica</td>
</tr>
<tr>
<td>227</td>
<td>Fabricii Entomologia Systematica, 5 vols. and index</td>
</tr>
<tr>
<td>228</td>
<td>Fabricii Species Insectorum, 2 vols.</td>
</tr>
<tr>
<td>229</td>
<td>Fabricii Mantissa</td>
</tr>
<tr>
<td>230</td>
<td>Fabricii Systema Piezatorum</td>
</tr>
<tr>
<td>231</td>
<td>Fabricii Systema Eleutheratorum, 2 vols.</td>
</tr>
<tr>
<td>232</td>
<td>Fabricii Systema Rhyngatorum</td>
</tr>
<tr>
<td>233</td>
<td>Fabricii Genera Insectorum</td>
</tr>
<tr>
<td>234</td>
<td>De Geer Genera Insectorum</td>
</tr>
<tr>
<td>235</td>
<td>Mouffet's Theatrum Insectorum</td>
</tr>
<tr>
<td>236</td>
<td>Pallas Icnones Insectorum</td>
</tr>
<tr>
<td>237</td>
<td>Schoeffer Icnones Insectorum, 3 vols.</td>
</tr>
<tr>
<td>238</td>
<td>Roemer Genera Insectorum</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>239</td>
<td>Scopoli Entomologia, 2 vols.</td>
</tr>
<tr>
<td>240</td>
<td>Fuessly Archives de l’Hist. des Insectes</td>
</tr>
<tr>
<td>241</td>
<td>Roesel’s Insects, 4 vols.</td>
</tr>
<tr>
<td>242</td>
<td>Kirby and Spence’s Introduction to Entomology, 4 vols.</td>
</tr>
<tr>
<td>243</td>
<td>Harris’ English Insects</td>
</tr>
<tr>
<td>244</td>
<td>Donovan’s British Insects, 5 vols., systematically arranged, and 6 unbound</td>
</tr>
<tr>
<td>245</td>
<td>Samouelle’s British Insects, 2 vols.</td>
</tr>
<tr>
<td>246</td>
<td>Marsham Entomologia Britannica, 2 vols.</td>
</tr>
<tr>
<td>247</td>
<td>Curtis’ British Insects</td>
</tr>
<tr>
<td>248</td>
<td>Macleay’s Horae Entomologicae</td>
</tr>
<tr>
<td>249</td>
<td>Fischer Entomographie de la Russie, 1 vol.</td>
</tr>
<tr>
<td>250</td>
<td>Gyllenhal Insecta Suecica, 2 vols.</td>
</tr>
<tr>
<td>251</td>
<td>Encyclopedique Methodie [sic] Hist. Nat. des Insectes, 8 vols and 1 vol of plates</td>
</tr>
<tr>
<td>252</td>
<td>Millard’s Entomology</td>
</tr>
<tr>
<td>253</td>
<td>Villar’s Entomologia, 4 vols.</td>
</tr>
<tr>
<td>254</td>
<td>Latreille Genres des Insectes</td>
</tr>
<tr>
<td>255</td>
<td>Yeats on Insects</td>
</tr>
<tr>
<td>256</td>
<td>Yeat’s Institutes of Entomology</td>
</tr>
<tr>
<td>257</td>
<td>Annulosa Javanica</td>
</tr>
<tr>
<td>258</td>
<td>Creutzer Entomologische Versuche</td>
</tr>
<tr>
<td>259</td>
<td>Barbut’s English Insects</td>
</tr>
<tr>
<td>260</td>
<td>Drury's Exotic Insects, 3 vols.</td>
</tr>
<tr>
<td>261</td>
<td>Spinolae Insecta Liguriae, 2 vols.</td>
</tr>
<tr>
<td>262</td>
<td>Fabricii Illustratio Icono graphica Insectorum, 2 vols.</td>
</tr>
<tr>
<td>263</td>
<td>Fourcroy’s Entomologia Parisiensis</td>
</tr>
<tr>
<td>264</td>
<td>Panzer Insecte Deutschlands</td>
</tr>
<tr>
<td>265</td>
<td>Panzer Revision des Insecten Faune Deutschlands</td>
</tr>
<tr>
<td>266</td>
<td>Panzeri Index Entomolgicus in Faunâ Germanica</td>
</tr>
<tr>
<td>267</td>
<td>Entomologie Helvetique, 2 vols.</td>
</tr>
<tr>
<td>268</td>
<td>Illiger Mag. sur Insectenkund, 3 vols.</td>
</tr>
<tr>
<td>269</td>
<td>Schneider Mag. der Entomologie</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>270</td>
<td>Paykul Carabi et Staphylini</td>
</tr>
<tr>
<td>271</td>
<td>Dejean Species des Coleopteres, 6 vols.</td>
</tr>
<tr>
<td>272</td>
<td>Cramer Papillons Exotiques, 5 vols, et Supt. Par Stoll</td>
</tr>
<tr>
<td>273</td>
<td>Hubner Europeischen Schmetterlinge, 5 vols.</td>
</tr>
<tr>
<td>274</td>
<td>Hubner Supplement to Schmetterlinge</td>
</tr>
<tr>
<td>275</td>
<td>Esper Schmetterlinge</td>
</tr>
<tr>
<td>276</td>
<td>Lewin's British Butterflies</td>
</tr>
<tr>
<td>277</td>
<td>Ernst Papillons d'Europe, 7 vols.</td>
</tr>
<tr>
<td>278</td>
<td>Hubner's Exotic Lepidoptera</td>
</tr>
<tr>
<td>279</td>
<td>Haworth's Lepidoptera Britanica, 2 vols.</td>
</tr>
<tr>
<td>280</td>
<td>Schellenberg Ciwicum Helvetiae Genera</td>
</tr>
<tr>
<td>281</td>
<td>Klug Entomologische Monographien</td>
</tr>
<tr>
<td>282</td>
<td>Klug Monographia Sricum Germaniae</td>
</tr>
<tr>
<td>283</td>
<td>Redi Experimenta circa Generationem Insectorum</td>
</tr>
<tr>
<td>284</td>
<td>Insect Architecture</td>
</tr>
<tr>
<td>286</td>
<td>Scriba, Beitrage</td>
</tr>
<tr>
<td>287</td>
<td>Germar, Species Novae Insectorum</td>
</tr>
<tr>
<td>288</td>
<td>Berkenhout's Synopsis, 2 vols.</td>
</tr>
<tr>
<td>289</td>
<td>Herbst Kaefer Insecten, 5 vols 1 unbound, &amp; 1 v. plates</td>
</tr>
<tr>
<td>290</td>
<td>Latreille's Tracts</td>
</tr>
<tr>
<td>291</td>
<td>Barbut's Genera Vermium</td>
</tr>
<tr>
<td>292</td>
<td>Leach's Malacostraca</td>
</tr>
<tr>
<td>293</td>
<td>Risso Crustacées de Nice</td>
</tr>
<tr>
<td>294</td>
<td>Ellis on Corallines</td>
</tr>
<tr>
<td>295</td>
<td>Ellis's History of Zoophytes</td>
</tr>
<tr>
<td>296</td>
<td>Cubiere's Hist. des Coquillages</td>
</tr>
<tr>
<td>297</td>
<td>Jurine Hist. des Monocles</td>
</tr>
<tr>
<td>298</td>
<td>Leach’s Observations on the genus Ocythoe</td>
</tr>
<tr>
<td>299</td>
<td>Kirby's Monographia Apium, 2 vols.</td>
</tr>
<tr>
<td>300</td>
<td>Schellenberg Generes des Mouches</td>
</tr>
</tbody>
</table>
### END OF FIRST DAY’S SALE

**SECOND DAY’S SALE (pp. 10–17)**

<table>
<thead>
<tr>
<th>Lot</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C. Stoll, Cigales</td>
</tr>
<tr>
<td>2</td>
<td>C. Stoll, Phasmes et Sauterelles</td>
</tr>
<tr>
<td>3</td>
<td>C. Stoll, Punaises</td>
</tr>
<tr>
<td>4</td>
<td>Walcknaer’s Memoires des Abeilles Solitaires</td>
</tr>
<tr>
<td>5</td>
<td>Latreille’s Hist. Nat. des Fourmis</td>
</tr>
<tr>
<td>6</td>
<td>Huber Reserches sur les Moeurs des Fourmis</td>
</tr>
<tr>
<td>7</td>
<td>Wollfe Icones Cimicum</td>
</tr>
<tr>
<td>8</td>
<td>Entomological Tracts</td>
</tr>
<tr>
<td>9</td>
<td>Entomological Tracts, Haworth and Fallen’s</td>
</tr>
<tr>
<td>10</td>
<td>Lesser's Insect-Theology</td>
</tr>
<tr>
<td>11</td>
<td>Entomology, Curtis, Yeats, Woodward</td>
</tr>
<tr>
<td>12</td>
<td>Madame Merian’s Insects of Surinam, bound</td>
</tr>
<tr>
<td>13</td>
<td>Madame Merian’s Insects of Surinam, unbound</td>
</tr>
<tr>
<td>14</td>
<td>Lyonnet Anatomie de la Chenille</td>
</tr>
<tr>
<td>15</td>
<td>Martini and Chemnitz Shells (Conchylien Cabinet), 11 vols.</td>
</tr>
<tr>
<td>16</td>
<td>Barbut’s Testacea</td>
</tr>
<tr>
<td>17</td>
<td>Fichtel et Moll, Testacea Microscopica</td>
</tr>
<tr>
<td>18</td>
<td>Donovan’s British Shells, systematically arranged, 2 v.</td>
</tr>
<tr>
<td>19</td>
<td>Montagu's British Shells, 3 vols.</td>
</tr>
<tr>
<td>20</td>
<td>Woods Catalogue of Shells</td>
</tr>
<tr>
<td>21</td>
<td>Linnaei Bibliotheca Botanica</td>
</tr>
<tr>
<td>22</td>
<td>Linnaei Genera Plantarum</td>
</tr>
<tr>
<td>23</td>
<td>Linnaei Species Plantarum, 2 vols.</td>
</tr>
<tr>
<td>24</td>
<td>Linnaei Species, Curâ Wildenow, 10 vols.</td>
</tr>
<tr>
<td>25</td>
<td>Systema Vegetabilium Curâ Sprengel, 4 vols.</td>
</tr>
<tr>
<td>26</td>
<td>Linnaei Supplementum Plantarum, Systematis Vegetabilium, &amp;c.</td>
</tr>
<tr>
<td>27</td>
<td>Linnaei Philosophia Botanica</td>
</tr>
<tr>
<td>28</td>
<td>Schreber, Linnaei Genera Plantarum, 2 vols.</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>29</td>
<td>Raii Methodus Plantarum</td>
</tr>
<tr>
<td>30</td>
<td>De Candolle Theorie Elementaire de la Botanique</td>
</tr>
<tr>
<td>31</td>
<td>De Candolle Prodromus Regni Vegetabilis, 2 vols.</td>
</tr>
<tr>
<td>32</td>
<td>De Candolle Systema Naturale Regni Vegetabilis</td>
</tr>
<tr>
<td>33</td>
<td>De Jussieu, Genera Plantarum, 2 copies</td>
</tr>
<tr>
<td>34</td>
<td>Persoon, Synopsis Plantarum, 2 vols.</td>
</tr>
<tr>
<td>35</td>
<td>Persoon, Synopsis Fungorum</td>
</tr>
<tr>
<td>36</td>
<td>Fries, Orbis Vegetabilis Systema</td>
</tr>
<tr>
<td>37</td>
<td>Steudel Nomenclator Botanicus, 2 vols.</td>
</tr>
<tr>
<td>38</td>
<td>Des Fontaines Tebleau [sic] des Plantes</td>
</tr>
<tr>
<td>39</td>
<td>Girardin Essai de Physiologie Vegetable</td>
</tr>
<tr>
<td>40</td>
<td>Pursh’s Flora Americae</td>
</tr>
<tr>
<td>41</td>
<td>Darwin’s Phytologia</td>
</tr>
<tr>
<td>43</td>
<td>Smith’s Introduction to Botany</td>
</tr>
<tr>
<td>44</td>
<td>Smith’s Grammar of Botany</td>
</tr>
<tr>
<td>45</td>
<td>Martyn’s Botany</td>
</tr>
<tr>
<td>46</td>
<td>Thornton’s Botany, 2 vols.</td>
</tr>
<tr>
<td>47</td>
<td>Rose’s Introduction to Botany</td>
</tr>
<tr>
<td>48</td>
<td>Martyn’s Botanical Lectures</td>
</tr>
<tr>
<td>49</td>
<td>Smith’s Tracts on Botany</td>
</tr>
<tr>
<td>50</td>
<td>Wildenow’s Botany</td>
</tr>
<tr>
<td>51</td>
<td>Forster, Characteres Generum Plantarum</td>
</tr>
<tr>
<td>52</td>
<td>Evelyn’s Silva et Terra, 2 vols.</td>
</tr>
<tr>
<td>53</td>
<td>Tournefort’s complete Herbal</td>
</tr>
<tr>
<td>54</td>
<td>Thornton’s Botany—illustration of Sexual System—(<em>a magnificent book</em>)</td>
</tr>
<tr>
<td>55</td>
<td>Ditto, a different work, half-bound</td>
</tr>
<tr>
<td>56</td>
<td>Annales des Science, Botanique, 5 vols.</td>
</tr>
<tr>
<td>57</td>
<td>Horticultural Society’s Transactions, 7 vols.</td>
</tr>
<tr>
<td>58</td>
<td>Curtis’ Botanical Magazine, 60 vols. ... vols. 51 to 60 not arranged</td>
</tr>
<tr>
<td>59</td>
<td>Exotic Botany, 2 vols. in one</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>60</td>
<td>König and Sims' Annals of Botany, 2 vols.</td>
</tr>
<tr>
<td>61</td>
<td>Thunberg's Dissertationes Academicae, 4 vols.</td>
</tr>
<tr>
<td>62</td>
<td>Archives de Botanique</td>
</tr>
<tr>
<td>63</td>
<td>Linnaei Amaenitates Academicae</td>
</tr>
<tr>
<td>64</td>
<td>Topographie des Vignobles</td>
</tr>
<tr>
<td>65</td>
<td>Bye-laws of Medico Botanical Society</td>
</tr>
<tr>
<td>66</td>
<td>Histoire Nat. du Cacao et Sucre</td>
</tr>
<tr>
<td>67</td>
<td>[missing entry]</td>
</tr>
<tr>
<td>68</td>
<td>Lambert on Chincona</td>
</tr>
<tr>
<td>69</td>
<td>La Billardiere Plantarum Specimen Novae Hollandiae</td>
</tr>
<tr>
<td>70</td>
<td>Smith's English Flora, 4 vols.</td>
</tr>
<tr>
<td>71</td>
<td>Smith's Flora Britannica, 3 vols.</td>
</tr>
<tr>
<td>72</td>
<td>Smith's Compendium Florae Brit.</td>
</tr>
<tr>
<td>73</td>
<td>Galpine's Synoptical Compend of British Botany</td>
</tr>
<tr>
<td>74</td>
<td>Sowerby's English Botany, complete, and systematically arranged, in 20 vols.</td>
</tr>
<tr>
<td>75</td>
<td>Sowerby's English Fungi, 3 vols.</td>
</tr>
<tr>
<td>76</td>
<td>Hudsoni Flora Anglica, 2 vols.</td>
</tr>
<tr>
<td>77</td>
<td>Hortus Kewensis, 5 vols.</td>
</tr>
<tr>
<td>78</td>
<td>Hooker's Flora Scotica</td>
</tr>
<tr>
<td>80</td>
<td>Withering's British Plants, 4 vols.</td>
</tr>
<tr>
<td>81</td>
<td>Linnaei Hortus Upsalensis</td>
</tr>
<tr>
<td>82</td>
<td>Dillenius' History of Mosses</td>
</tr>
<tr>
<td>83</td>
<td>Lindley's Monographia Rosarum</td>
</tr>
<tr>
<td>84</td>
<td>Bauers' Illustrationes Florae Novae Hollandiae, 2 nos.</td>
</tr>
<tr>
<td>85</td>
<td>Miller's Gardeners Dictionary, 4 vols.</td>
</tr>
<tr>
<td>86</td>
<td>Loudon's Gardeners Magazine, 10 vols., and 3 unbound</td>
</tr>
<tr>
<td>87</td>
<td>Darwin's Botanic Garden</td>
</tr>
<tr>
<td>88</td>
<td>Guilding's Bot. Garden of St. Vincent</td>
</tr>
<tr>
<td>89</td>
<td>Liverpool Bot. Garden</td>
</tr>
<tr>
<td>90</td>
<td>Catalogue of Plants growing wild about London</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>--------------</td>
</tr>
<tr>
<td>91</td>
<td>Shepherd's lectures on Landscape Gardening, 2 vols.</td>
</tr>
<tr>
<td>92</td>
<td>Retired Gardener, 2 vols.</td>
</tr>
<tr>
<td>93</td>
<td>Loudon's Encyclopaedia of Gardening</td>
</tr>
</tbody>
</table>

**MINERALOGY AND GEOLOGY**

<table>
<thead>
<tr>
<th>Lot</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>Babington's Mineralogy</td>
</tr>
<tr>
<td>96</td>
<td>Mawe's Mineralogy</td>
</tr>
<tr>
<td>97</td>
<td>Beaudant's Traité Elementaire de Mineralogie</td>
</tr>
<tr>
<td>98</td>
<td>Jameson's Mineralogy, 3 vols.</td>
</tr>
<tr>
<td>99</td>
<td>Sowerby's British Mineralogy, arranged, 5 vols.</td>
</tr>
<tr>
<td>100</td>
<td>Jameson's Mineralogy of the British Isles</td>
</tr>
<tr>
<td>101</td>
<td>Schmeisser's Syllabus of Mineralogy</td>
</tr>
<tr>
<td>102</td>
<td>Kirwan's Mineralogy, 2 vols.</td>
</tr>
<tr>
<td>103</td>
<td>Walker's Classes Fossilium</td>
</tr>
<tr>
<td>104</td>
<td>Sowerby's Mineral Couchology [<em>sic</em>], arranged, 5 vols.</td>
</tr>
<tr>
<td>106</td>
<td>Cuvier's Theory of the earth, Mitchil [<em>sic</em>]</td>
</tr>
<tr>
<td>108</td>
<td>Brande's Geology</td>
</tr>
<tr>
<td>109</td>
<td>Breislak's Introduction a la Geologie</td>
</tr>
<tr>
<td>111</td>
<td>Keile's Theory of the Earth, 2 vols.</td>
</tr>
<tr>
<td>112</td>
<td>Buckland’s Reliquiae Diluvianae</td>
</tr>
<tr>
<td>113</td>
<td>Fitton's account of Geological Specimens from Coasts of New Holland</td>
</tr>
<tr>
<td>114</td>
<td>Drury's thoughts on the Precious Metals</td>
</tr>
</tbody>
</table>

**NATURAL PHILOSOPHY**

<table>
<thead>
<tr>
<th>Lot</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>115</td>
<td>Philosophical Transactions of the Royal Society, abridged, to 1800, 18 vols., and from 1801 to 1834, 36 vols., with 4 parts for 1837 and 1838 unbound</td>
</tr>
<tr>
<td>116</td>
<td>Continuation of Index to ditto, unbound, from 1821 to 1830</td>
</tr>
<tr>
<td>117</td>
<td>Addresses delivered at Meetings of the Royal Society</td>
</tr>
<tr>
<td>118</td>
<td>Hill's Review of the Works of the Royal Society</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>119</td>
<td>Retrospect of Discoveries in Natural Philosophy, 1809</td>
</tr>
<tr>
<td>120</td>
<td>Annals of Philosophy, 18 vols.</td>
</tr>
<tr>
<td>121</td>
<td>Saumarez on the Principles and Ends of Philosophy</td>
</tr>
<tr>
<td>122</td>
<td>Young’s Lectures, 2 vols.</td>
</tr>
<tr>
<td>123</td>
<td>Adams’ Lectures on Natural Philosophy, 5 vols.</td>
</tr>
<tr>
<td>125</td>
<td>Newton’s Principia, 3 vols.</td>
</tr>
<tr>
<td>126</td>
<td>Celestial Mechanics of La Place</td>
</tr>
<tr>
<td>127</td>
<td>Traité de Mechanique Celeste, 4 vols.</td>
</tr>
<tr>
<td>128</td>
<td>Ferguson’s Astronomy</td>
</tr>
<tr>
<td>129</td>
<td>Euler’s Letters, 2 vols.</td>
</tr>
<tr>
<td>130</td>
<td>Bird’s Juvenile Astronomy</td>
</tr>
<tr>
<td>131</td>
<td>Plane Geometry (Library of Useful Knowledge)</td>
</tr>
<tr>
<td>132</td>
<td>Algebraical Geometry (Library of Useful Knowledge)</td>
</tr>
<tr>
<td>133</td>
<td>Playfair on the Huttonian Theory</td>
</tr>
<tr>
<td>134</td>
<td>Journal of Science, 4 vols.</td>
</tr>
<tr>
<td>135</td>
<td>Lardner’s Cabinet Cyclopaedia, Nat. Philosophy, 9 vols.</td>
</tr>
<tr>
<td>136</td>
<td>Law on Space</td>
</tr>
<tr>
<td>137</td>
<td>Bridgewater Treatise, whole series, 10 vols.</td>
</tr>
<tr>
<td>138</td>
<td>Minute Philosopher</td>
</tr>
</tbody>
</table>

**CHEMISTRY, &C.**

<table>
<thead>
<tr>
<th>Lot</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>139</td>
<td>Sir H. Davy’s Six Discourses</td>
</tr>
<tr>
<td>140</td>
<td>Fourcroy’s Chemical Philosophy</td>
</tr>
<tr>
<td>141</td>
<td>Fourcroy’s Chemical Tables</td>
</tr>
<tr>
<td>142</td>
<td>Chaptal, 2 vols.</td>
</tr>
<tr>
<td>143</td>
<td>Fourcroy’s Chemistry, 10 vols.</td>
</tr>
<tr>
<td>145</td>
<td>Parkes’ Chemical Catechism</td>
</tr>
<tr>
<td>146</td>
<td>Parkinson’s Chemical Pocket Book</td>
</tr>
<tr>
<td>147</td>
<td>Conversations on Chemistry</td>
</tr>
<tr>
<td>148</td>
<td>Introduction to Chemistry and Galvanism</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>149</td>
<td>Adams on the Microscope, by Kammacher</td>
</tr>
<tr>
<td>150</td>
<td>Improvements in the Microscope, by Varley and Valentine</td>
</tr>
<tr>
<td>151</td>
<td>Sowerby's New Elucidation of Colours</td>
</tr>
<tr>
<td>152</td>
<td>Hooper's Rational Recreations, 4 vols.</td>
</tr>
<tr>
<td>153</td>
<td>Friend's Evening Amusements, 3 vols.</td>
</tr>
<tr>
<td>154</td>
<td>Spurzheim on Phrenology</td>
</tr>
<tr>
<td>155</td>
<td>Manual of Phrenology</td>
</tr>
<tr>
<td>156</td>
<td>Well's on Vision and Dew</td>
</tr>
<tr>
<td>157</td>
<td>Hibbert's Philosophy of Apparitions</td>
</tr>
<tr>
<td></td>
<td><strong>MEDICINE AND ARTS</strong></td>
</tr>
<tr>
<td>158</td>
<td>Adams on Morbid Poisons</td>
</tr>
<tr>
<td>159</td>
<td>Medical Facts</td>
</tr>
<tr>
<td>160</td>
<td>Crowther on White Swelling</td>
</tr>
<tr>
<td>161</td>
<td>Duncan on Consumption</td>
</tr>
<tr>
<td>162</td>
<td>Salmon's complete System of Physic</td>
</tr>
<tr>
<td>163</td>
<td>Cheselden's Anatomy of the Human Body</td>
</tr>
<tr>
<td>164</td>
<td>Treatise on Cupping</td>
</tr>
<tr>
<td>165</td>
<td>Lardner's Cabinet Cyclopaedia, Useful Arts, 6 vols.</td>
</tr>
<tr>
<td>166</td>
<td>Mosely on Mechanics applied to the Arts</td>
</tr>
<tr>
<td>167</td>
<td>Handmaid to the Arts, 2 vols.</td>
</tr>
<tr>
<td>168</td>
<td>The Bee, Periodical, 18 vols.</td>
</tr>
<tr>
<td>169</td>
<td>Goquet's origin of Laws, Arts and Sciences, 3 vols.</td>
</tr>
<tr>
<td>170</td>
<td>Bingley's Useful Knowledge, 3 vols.</td>
</tr>
<tr>
<td>171</td>
<td>Encyclopaedie Methodique des Beaux Arts, 5 vols.</td>
</tr>
<tr>
<td>172</td>
<td>Bromley's Catalogue of Portraits</td>
</tr>
<tr>
<td>173</td>
<td>Loudon's Encyclopaedia of Architecture</td>
</tr>
<tr>
<td>174</td>
<td>Vignola Architectura</td>
</tr>
<tr>
<td>175</td>
<td>Venuti Antichita di Roma</td>
</tr>
<tr>
<td>176</td>
<td>Northern Antiquities</td>
</tr>
<tr>
<td>177</td>
<td>Picturesque Antiquities of Scotland, 2 vols.</td>
</tr>
<tr>
<td>178</td>
<td>Antiquarian Cabinet, 10 vols.</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>179</td>
<td>Borlase’s Antiquities of Cornwall</td>
</tr>
<tr>
<td>180</td>
<td>De Cardon’s Numismata Scotiae</td>
</tr>
<tr>
<td>181</td>
<td>Snelling on Irish Coins</td>
</tr>
<tr>
<td>182</td>
<td>Snelling on Coins</td>
</tr>
<tr>
<td>183</td>
<td>English Coins</td>
</tr>
<tr>
<td>184</td>
<td>Pinkerton on Medals, 2 vols.</td>
</tr>
<tr>
<td>185</td>
<td>Canute’s Coins</td>
</tr>
<tr>
<td>186</td>
<td>Veterum Populorum et Regum nummi in Musaeo Brit</td>
</tr>
<tr>
<td>187</td>
<td>Adams’ Roman Antiquities</td>
</tr>
</tbody>
</table>

**AGRICULTURE**

<table>
<thead>
<tr>
<th>Lot</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>188</td>
<td>Sinclair’s Code of Agriculture</td>
</tr>
<tr>
<td>189</td>
<td>Encyclopaedia of Agriculture, Loudon</td>
</tr>
<tr>
<td>190</td>
<td>Crescenzi Agricoltura, 3 vols.</td>
</tr>
<tr>
<td>191</td>
<td>Palladio Agricoltura</td>
</tr>
<tr>
<td>192</td>
<td>Original Reports of the Board of Agriculture, 11 vols.</td>
</tr>
<tr>
<td>193</td>
<td>Communications to the Board of Agriculture</td>
</tr>
<tr>
<td>194</td>
<td>Prize Essays &amp; Transactions of the Highland Society, 4 vols.</td>
</tr>
<tr>
<td>195</td>
<td>Dictionnaire d’Agriculture, 2 vols.</td>
</tr>
<tr>
<td>196</td>
<td>Grey’s Agricultural Implements</td>
</tr>
<tr>
<td>197</td>
<td>Keys on Bees</td>
</tr>
<tr>
<td>198</td>
<td>La Cultivatione et le Api de Luigi et Allamanui</td>
</tr>
<tr>
<td>199</td>
<td>Kirwan’s Manures</td>
</tr>
<tr>
<td>200</td>
<td>Blith’s Husbandry</td>
</tr>
<tr>
<td>201</td>
<td>Museum Rusticum</td>
</tr>
<tr>
<td>202</td>
<td>McAdam on Roads</td>
</tr>
<tr>
<td>203</td>
<td>Resources of Australia</td>
</tr>
<tr>
<td>204</td>
<td>Riley’s Introduction of Cachmere Angora Goat into Australia</td>
</tr>
</tbody>
</table>

**GEOGRAPHY AND TOPOGRAPHY**

<table>
<thead>
<tr>
<th>Lot</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>205</td>
<td>Malte-Brun’s Geography, 10 vols.</td>
</tr>
<tr>
<td>206</td>
<td>Guthrie’s Geographical Grammar</td>
</tr>
<tr>
<td>207</td>
<td>Pinkerton’s Geographical Grammar</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>208</td>
<td>Bowdich’s Essay on Geography</td>
</tr>
<tr>
<td>210</td>
<td>Lardner’s Cabinet Cyclopaedia, Geography, 4 vols.</td>
</tr>
<tr>
<td>211</td>
<td>Lyson’s Magna Brittanica, 7 vols.</td>
</tr>
<tr>
<td>212</td>
<td>Bouchett’s British Dominions in North America, 2 vols.</td>
</tr>
<tr>
<td>213</td>
<td>Bouchett’s Topographical Dictionary of Lower Canada</td>
</tr>
<tr>
<td>214</td>
<td>Pennant’s London</td>
</tr>
<tr>
<td>215</td>
<td>National Views in London</td>
</tr>
<tr>
<td>216</td>
<td>Pennants Tour in Scotland, 3 vols.</td>
</tr>
<tr>
<td>217</td>
<td>Guides through Scotland, 5 vols.</td>
</tr>
<tr>
<td>218</td>
<td>Glasgow Delineated</td>
</tr>
<tr>
<td>219</td>
<td>Memorabilia of the City of Perth</td>
</tr>
<tr>
<td>220</td>
<td>The Friend of Australia</td>
</tr>
<tr>
<td>221</td>
<td>O’Hara’s New South Wales</td>
</tr>
<tr>
<td>222</td>
<td>Collins’ N. S. Wales, 2 vols.</td>
</tr>
<tr>
<td>223</td>
<td>Hunter’s N. S. Wales</td>
</tr>
<tr>
<td>224</td>
<td>Grant’s N. S. Wales</td>
</tr>
<tr>
<td>225</td>
<td>Wentworth’s N. S. Wales</td>
</tr>
<tr>
<td>226</td>
<td>Field’s N. S. Wales</td>
</tr>
<tr>
<td>227</td>
<td>Cunningham’s N. S. Wales, 2 vols.</td>
</tr>
<tr>
<td>228</td>
<td>Henderson’s N. S. Wales</td>
</tr>
<tr>
<td>229</td>
<td>Lang’s N. S. Wales, 2 vols.</td>
</tr>
<tr>
<td>230</td>
<td>Dawson’s Present State of Australia</td>
</tr>
<tr>
<td>231</td>
<td>Gouger’s Letter from Sydney</td>
</tr>
<tr>
<td>232</td>
<td>Bischoff’s V. Diemen’s land</td>
</tr>
<tr>
<td>233</td>
<td>Curr’s V. Diemen’s Land</td>
</tr>
<tr>
<td>234</td>
<td>Savage’s New Zealand</td>
</tr>
<tr>
<td>235</td>
<td>Earle’s New Zealand</td>
</tr>
<tr>
<td>236</td>
<td>Bright’s New Zealand</td>
</tr>
<tr>
<td>237</td>
<td>Petre’s New Zealand</td>
</tr>
<tr>
<td>238</td>
<td>Jameson’s New Zealand and N. S. Wales</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>241</td>
<td>Do. Analysis of Statistical Account of Scotland</td>
</tr>
<tr>
<td>242</td>
<td>Whittaker’s Richmondshire, 2 vols.</td>
</tr>
<tr>
<td>243</td>
<td>Monk’s Paris as it is and as it was, 2 vols.</td>
</tr>
<tr>
<td>244</td>
<td>Scott’s Visit to Paris</td>
</tr>
<tr>
<td>245</td>
<td>Description of Stonehenge</td>
</tr>
<tr>
<td>246</td>
<td>Dupuis’ Residence in Ashantee</td>
</tr>
<tr>
<td>247</td>
<td>Ten Years Residence in Tripoli</td>
</tr>
<tr>
<td>248</td>
<td>Moodie’s Ten Years in S. Africa</td>
</tr>
<tr>
<td>249</td>
<td>Cruise’s Ten Months Residence in New Zealand</td>
</tr>
<tr>
<td>250</td>
<td>Dalrymples Memoirs of Charts</td>
</tr>
<tr>
<td>251</td>
<td>Abel’s Voyage to China</td>
</tr>
<tr>
<td>252</td>
<td>Description de la Chine, 2 vols.</td>
</tr>
<tr>
<td>253</td>
<td>Crawfur’d’s Indian Archipelago, 3 vols.</td>
</tr>
<tr>
<td>254</td>
<td>Burman Empire, 2 vols.</td>
</tr>
<tr>
<td>255</td>
<td>Raynal’s East and West Indies, 8 vols.</td>
</tr>
<tr>
<td>256</td>
<td>Humboldt’s Essai Politique de L’Ile de Cuba, 2 vols.</td>
</tr>
<tr>
<td>257</td>
<td>Hamilton’s East Indian Gazateer [sic], 2 vols.</td>
</tr>
<tr>
<td>258</td>
<td>Robert’s Account of Florida</td>
</tr>
<tr>
<td>259</td>
<td>Percival’s History of Ceylon</td>
</tr>
<tr>
<td>260</td>
<td>De Stäel D’Allemagne</td>
</tr>
<tr>
<td>261</td>
<td>Yates’ New Zealand</td>
</tr>
<tr>
<td>262</td>
<td>Mariner’s Tonga Islands, 2 vols.</td>
</tr>
<tr>
<td>263</td>
<td>Hakluyt’s Voyages</td>
</tr>
<tr>
<td>264</td>
<td>Collections of Early Voyages</td>
</tr>
<tr>
<td>265</td>
<td>Marsden’s Travels of Marco Polo</td>
</tr>
<tr>
<td>266</td>
<td>Flinder’s Voyage to Terra Australis, 2 vols., and Atlas.</td>
</tr>
<tr>
<td>267</td>
<td>La Perouse Voyage, 4 vols., and Atlas</td>
</tr>
<tr>
<td>268</td>
<td>Embassy to China, Staunton, 2 vols., and volume of Plates in folio</td>
</tr>
<tr>
<td>269</td>
<td>Barrow’s Voyage to Cochin China</td>
</tr>
<tr>
<td>Lot</td>
<td>Transcription</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>270</td>
<td>Burney’s South Sea Voyages, 5 vols.</td>
</tr>
<tr>
<td>271</td>
<td>Parkinson’s Journal of a Voyage to the South Seas</td>
</tr>
<tr>
<td>272</td>
<td>Fryar’s Travels</td>
</tr>
<tr>
<td>273</td>
<td>Tuckey’s Expedition to the River Zaire, or Congo</td>
</tr>
<tr>
<td>274</td>
<td>Bligh’s Voyage</td>
</tr>
<tr>
<td>275</td>
<td>Missionary Voyage</td>
</tr>
<tr>
<td>276</td>
<td>Mortimer’s Voyage to N. S. Wales</td>
</tr>
<tr>
<td>277</td>
<td>Lord Valentia’s Voyages to India and Ceylon, 3 vols.</td>
</tr>
<tr>
<td>278</td>
<td>Salt’s Travels in Abyssinia</td>
</tr>
<tr>
<td>279</td>
<td>Anson’s Voyage</td>
</tr>
<tr>
<td>280</td>
<td>Boujainville’s Voyage</td>
</tr>
<tr>
<td>281</td>
<td>Parry’s 1st, 2nd, and 3rd. Voyages of Discovery, 4 vols.</td>
</tr>
<tr>
<td>282</td>
<td>Dixon’s Voyages</td>
</tr>
<tr>
<td>283</td>
<td>Mackenzie’s Voyages</td>
</tr>
<tr>
<td>284</td>
<td>Gage’s Travels</td>
</tr>
<tr>
<td>286</td>
<td>Sonnini’s Travels, 1 vol., and volume of plates</td>
</tr>
<tr>
<td>287</td>
<td>Philip’s Voyage</td>
</tr>
<tr>
<td>288</td>
<td>White’s Journal</td>
</tr>
<tr>
<td>289</td>
<td>Buchanan’s Journey through the Mysore, 3 vols.</td>
</tr>
<tr>
<td>290</td>
<td>Broughton’s Voyage of Discovery in the Pacific</td>
</tr>
<tr>
<td>291</td>
<td>Buckingham’s Travels in Palestine</td>
</tr>
<tr>
<td>292</td>
<td>Discoveries of the French in the South Seas</td>
</tr>
<tr>
<td>293</td>
<td>Wilkinson’s Wallachia and Moldavia</td>
</tr>
<tr>
<td>294</td>
<td>Collection of Voyages, 4 vols.</td>
</tr>
<tr>
<td>295</td>
<td>Foster’s Observations during a Voyage round the World</td>
</tr>
<tr>
<td>296</td>
<td>Gilbert’s Voyage from N.S. Wales to Canton</td>
</tr>
<tr>
<td>298</td>
<td>Turnbull’s Voyage</td>
</tr>
<tr>
<td>299</td>
<td>Oxley’s New South Wales</td>
</tr>
<tr>
<td>300</td>
<td>Barrow’s Travels in Africa, 2 vols.</td>
</tr>
</tbody>
</table>
END OF SECOND DAYS’ SALE
THIRD DAYS’ SALE [pp. 18-19]

1. Anaracharsis the Younger’s, Travels, 2 vols.
2. Garnett’s Tour in Scotland
3. Johnson’s Oriental Voyages
5. P. Gass, a Journal of Voyages and Travels
6. Spallanzani’s Travels
8. Franklin’s Journey to the Coppermine River, 2 vols.
12. Finlayson’s Mission to Siam
13. Lewis’ Voyage to Torres’ Straits
14. Reid’s Voyage to N.S. Wales
15. Hume and Hovel’s Journey of Discovery to Port Phillip
17. Seconde Voyage du Cook, 6 vols.
19. Collections of Voyages, 4 vols.
20. Sparrman’s Voyage to the Cape of Good Hope, 2 vols.
21. Russel’s Tour in Germany, 2 vols.
22. Hawkesworth’s Voyages in the South Hemisphere, 4 vols.
24. Jeffrey and Evan’s Voyage to V.D. Land
25. Olivier’s Travels in Ottoman Empire, Egypt, &c., 2 vols.
26. Sonnini’s Travels in Greece and Turkey, 2 vols.
27. Staunton’s Embassy to China, 3 vols.
28. Voyage in Search of La Perouse, 2 vols., and volume of Plates
<table>
<thead>
<tr>
<th>Lot</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Dillon's Discovery of the fate of La Perouse, 2 vols.</td>
</tr>
<tr>
<td>30</td>
<td>Gell's Itinerary of the Morea</td>
</tr>
<tr>
<td>31</td>
<td>Modern Traveller, 30 vols.</td>
</tr>
<tr>
<td>32</td>
<td>Campbell's Travels in South Africa</td>
</tr>
<tr>
<td>33</td>
<td>Constable's Miscellany, Travels, 3 vols.</td>
</tr>
<tr>
<td>34</td>
<td>Barrow's Voyages</td>
</tr>
<tr>
<td>35</td>
<td>Dampier's Voyages, 3 vols.</td>
</tr>
<tr>
<td>36</td>
<td>Account of Voyages and Discoveries in the South Sea, Narborough, Tasman, Wood</td>
</tr>
<tr>
<td>37</td>
<td>Bulkeley's Voyage to the South Sea</td>
</tr>
<tr>
<td>38</td>
<td>Nightingale's Oceanic Sketches</td>
</tr>
<tr>
<td>39</td>
<td>Hall's Travels in America, 3 vols.</td>
</tr>
<tr>
<td>40</td>
<td>Hall's Voyage to Loo Choo</td>
</tr>
<tr>
<td>41</td>
<td>Tuckey's Voyage to the South Coast of New Holland</td>
</tr>
<tr>
<td>42</td>
<td>Tench's Expedition to Botany Bay</td>
</tr>
<tr>
<td>43</td>
<td>Vancouver's Voyage round the World, 6 vols.</td>
</tr>
<tr>
<td>44</td>
<td>Swinburne's Travels in the Two Sicilies, 4 vols.</td>
</tr>
<tr>
<td>45</td>
<td>Swinburne's Travels in Spain, 2 vols.</td>
</tr>
<tr>
<td>46</td>
<td>Lempriere's Tour in Morocco</td>
</tr>
<tr>
<td>47</td>
<td>Barrington's Voyage to New South Wales, 2 vols.</td>
</tr>
<tr>
<td>48</td>
<td>Neill's Horticultural Tour in Flanders, Holland, and part of France</td>
</tr>
<tr>
<td>49</td>
<td>Linnaeus Tour in Lapland, 2 vols.</td>
</tr>
<tr>
<td>50</td>
<td>Burney's Voyages to the South Pole, 4 vols.</td>
</tr>
<tr>
<td>51</td>
<td>Lander's Expedition down the Niger, 3 vols.</td>
</tr>
<tr>
<td>52</td>
<td>Ellis' Tour in Hawaii</td>
</tr>
<tr>
<td>53</td>
<td>Compendium of Voyages</td>
</tr>
</tbody>
</table>
Appendix D: Phillip Parker King Donations

AMS1, Minutes of the Board of Trustees Meetings, 1854 & 1856.

Saturday March 4th 1854

[Donations for February 1854:]

Capt. King R.N. | 25 vols Encyclopédie Méthodique
                | 9 vols Systema natura,
                | 4 vols Cuvier's Règne Animal
                | Hamilton Smith's Ruminantia

Saturday April 1st 1854

                    | Illustrations of the Genus Cinchona by R.B. Lambert Esq

April 5th 1856

Donations to the Australian Museum, during March 1856.

The following books, from the library of the late Rear Admiral Phillip Parker King R.N. - viz:

Edinburgh Philosophical Journal 12 vols
Abstract of papers from Philosophical Transactions 8 vols
Journal of Science and Arts - 21 vols
Nautical Almanac 24 vols
Greenwich Astronomical Observations 21 vols [Transferred to the Observatory 1860?]
Transactions of Royal Society 47 parts
French Maritime Atlas - 5 vols
Astronomical Observations of Radcliffe Observatory 10 vols [Transferred to the Observatory 1860?]
Rev. L. Vince’s Practical Astronomy
Philosophical Magazine 11 vols
Dr Willick’s lectures on diet
Tasmanian journal 16 vols
Shadwell’s occultation table
Shadwell’s star tables - 2 vols [Transferred to the Observatory 1860?]
Wrinkles [?], by Griffiths
Cercle de reflexion, par Borda
Astronomical Notices, 2 vols [Transferred to the Observatory 1860?]
Capt. Beechy, on Tidal Streams in English Channel
Tables of Equation for Sydney
Journal of Science and Art - 2 nos
Makerstown’s Magnetic Observations [Transferred to the Observatory 1860?]

These books were presented by the Rev. R.L. King, Parramatta.
Appendix E: John Vaughan Thompson

Six titles were donated to the Australian Museum 15 years after Thompson’s death, in 1862, by his son-in-law, Thomas George Wilson of Lake Innes:

Lake Innes, Port Macquarie, Febry. 14/62

Gentlemen,

Enclosed I have the pleasure of forwarding you a list of scientific works formerly belonging to the library of the late Dr John Vaughan Thompson, Deputy Inspector General of Hospitals. As I do not pretend to any scientific attainments myself – I would gladly present these to the Library of the Australian Museum, should they be considered worthy of acceptance ... Yours faithfully, T.G. Wilson.

AMS7, F:30, T.G. Wilson to the Committee of Management, Australian Museum, 14 February & 7 March 1862.

Two titles were duplicates and not accessioned:

Four titles were retained by the AMRL:
Miller, John, *Illustration of the Sexual System of Linnaeus*, London: [s.n.], 1779, vol. 1 only. RB DS80/MIL/RARE BOOKS
Appendix F: Ludwig Leichhardt

Part One: Transcript of an Inventory of the Leichhardt Collection, 1881.

Abbreviations in the following transcript are - Sig.: volumes signed by Ludwig Leichhardt; B: Original: volumes that appear not to have been rebound since Leichhardt’s ownership; B: LL: volumes bound by the AM and unique to the Leichhardt collection; B: PLNSW: volumes bound by the Public Library of NSW; B: Other: all other binding; 103900: a PLNSW accession number; 21 Ap. ‘02 AM: the date on which the volume was accessioned by the PLNSW after having been transferred from the Australian Museum; Acc. no.: an Australian Museum Library accession number. Item location abbreviations are SRL: State Reference Library; ML: Mitchell Library; AMRL: Australian Museum Research Library. Bold titles in the left-hand column indicate volumes which have been located and viewed. Titles marked with an asterisk (*) indicate those titles included in the subject analysis in Table 5 in the main body of the thesis.

[Mitchell Library. MSS. Papers relating to the Leichhardt Collection of books at one time in the Museum and now in the Public Library of New South Wales. A3938]

Papers relating to the Leichhardt Collection
Of BOOKS
At one time in the Museum, and now in the Public Library of New South Wales

[Section 1]

Moved by Dr Cox
That an inventory be made by the Curator and Secretary and laid before the next Board meeting of all

Books
Papers
Pamphlets
Instruments
Botanical Specimens
Journals
Private papers
And other relics belonging to the late Dr Leichhart [sic] lodged for safe custody in this Museum –

That the Secretary be instructed to look up any minutes in reference to the benefit [?] of such articles by the Trustees.

[Stamped ‘The Australian Museum Sydney, 5 Febry 1881.’]

[New page, p. 2]

4th Febry. 1846 Several specns. of Mammalia, Reptiles, Fishes & Birds collected and presented by Mr. Leichhardt were laid before the Meeting - A special letter of thanks was directed to be sent to Mr Leichhardt for the same.

12th Octr. 1847 The Honorary Secretary reported to the meeting that a number of very interesting objects of Natural History had been presented to the Museum by Dr. Leichhardt; as also a large assortment of seeds to the Botanic Gardens all collected by that gentleman during his late journeys in the interior. Resolved, that the special thanks of the committee for these contributions should be presented to Dr. Leichhardt.

1st Octr. 1853 A letter was read by the Chairman from Mr. Jas Murphy relative to certain properties of the late Dr. Leichhardt, left in his (Mr. Murphy's) hands; to enquire if they may be handed over to the Museum.

On the motion of W.S. Macleay Esq and seconded by the Revd. Robt. King it was Resolved ‘That the property above alluded to be deposited for safety in the Museum, for the benefit of the relatives of the late Dr. Leichhardt.’

[Stamped ‘The Australian Museum Sydney, 15 Febry 1881.’]
6th December 1860 Resolved that the Specimens of Australian Plants in the
possession of the Trustees collected by Sir Thomas L. Mitchell, Dr. Ludwig
Leichhardt and Mr. Stutchbury be sent to Dr. Ferd. Müller Director of the
Botanical Gardens at Melbourne, he undertaking to return the specimens.

1st Octbr. 1863 Permission was given to Dr. Ferd. Müller, Melbourne, to keep the
Herbarium of Leichhardt until the specimens contained therein were properly
described.

5th Novr/63. Portion of the above collection was sent from Melbourne.

7th Janry./69. A request from Dr. Müller to obtain any spare specimens of the
Leichhardt plants was agreed to.

[New page, p. 4]

Inventory of Relics of the late Dr. Leichhardt, lodged for safe custody in the
Museum.

1 Microscope and fittings[*]
2 flints—Spear Heads?
Collection of Botanical Specimens in the Cabinet Room.
   “ “ “ “ tin box.
Papers, Surveys, Field Books etc on Exhibition.
77 vols. books in Library.
22 “ (bound) in tin box.
55 “ (unbound or in paper) in tin box.
12 “ (bounds) m/s. -do-
1 packet letters, official documents -do-

[Stamped ‘The Australian Museum Sydney, 15 Febry 1881.’]
‘List of Books, the property of the late Dr. Leichhardt, in the Museum Library’

<table>
<thead>
<tr>
<th>Transcription</th>
<th>Bibliographic Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volumes</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>7-8</td>
<td>Leichhardt’s Excerpta aus verschiedenen journalen</td>
</tr>
<tr>
<td>1</td>
<td>Die Kunst des Gesanges</td>
</tr>
<tr>
<td>1</td>
<td>Lethaea Geognostica</td>
</tr>
<tr>
<td>2</td>
<td>Fab. Quintillian Institutionis Oratoriae</td>
</tr>
<tr>
<td>2</td>
<td>Elements of General History</td>
</tr>
</tbody>
</table>


[14*.] **Works of Virgil.***

*The works of Virgil translated into English prose,* ... With the Latin text and order of construction on the same page. London, 1754. See n. 44. [Classical Literature – Roman.] **Not located.**

[15*.] **C. Corneli Taciti Opera. 1v.***

[Classical Literature – Roman.] **Not identified.**

[16*.] **Herbart’s Philosophie***


http://library.sl.nsw.gov.au/record=b2209602~S2

[Philosophy & Psychology – Philosophy.]

[17*.] **Verhaltniss von Seele und Leib. 1v.***


http://library.sl.nsw.gov.au/record=b1474546~S2

[Philosophy & Psychology – Metaphysics.]

[18*.] **Mackeldeys Römischen Recht. 1v.***

Mackeldey, Ferdinand. *Lehrbuch des heutigen Römischen Rechts.* Giessen: bei Georg Friedrich Heyer, 1818. Sig. (earlier sig. crossed out); B:LL; 103926; 22 Ap. ‘02 AM; notes in ink in margins and ffep (may be earlier).


[Social Sciences – Law.]
[19*.] Meidingers Italänische Grammatik. 1v.

Meidinger, Johann Valentin. *Praktische Italienische Grammatik. Wodurch man diese Sprache auf eine ganz neue und sehr leichte Art in kurzer Zeit gründlich lernen kann.* Frankfurt am Main, 1815. See n. 44. [Languages – Italian] Not located.


Not identified.

[21*.] Nouvelle Grammaire Française. 1v.


[22*.] Clavis Ciceroniana Sive Indices. 1v.


[25*.] Comoediae Sex. 1v.

[New page, p. 6]

— ✓  [26*.] Xenophontis Cyropaedia. 1v.


[Classical literature – Greek]

— ✓  [27*.] T. Livii ab urbe condita libri. 3v.


— ✓  [28*.] Buchstaben Rëch-nung und Algebra. 1v.

[Mathematics] Not identified.

— ✓  [29*.] Nouvelle Flore des Environs de Paris. 2v.


http://library.sl.nsw.gov.au/record=b2752103~S

[Botanical Sciences – Botany – France]

✓  [30*.] Manuel Suppl. d’arpentage. 1v.


http://library.sl.nsw.gov.au/record=b2752119~S
✓ [31*.] Goethe. 1v.

Musculus, Karl Theodor. Inhalts—und namen—verzeichnisse über sämmtliche Goethe'sche Werke nach der ausgabe letzter hand und dem nachlasse, verfertigt von Carl Theodor Musculus...Stuttgart und Tübingen: Cotta, 1835. ML 832.62/2 [ML association card cat.]
B:LL; 103877; 18 Ap. ‘02 AM; ‘from P.L. May 1935’.

[Literature – German.]

— ✓ [32*.] Jean Paul. 2v.

Vol.1: Sig.; B:LL; 103859; 18 Ap. ‘02 AM.
Vol.2: Sig.; B:LL; 103860; 18 Ap. ‘02 AM.

[Literature – German.]

✓ [33*.] Gerusalemme Liberata. 2v.

Tasso, Torquato. La Gerusalemme liberata. Parigi, 1819. 18mo.
Vol.2: B:LL; 103862; 18 Ap. ‘02 AM.
http://library.sl.nsw.gov.au/record=b2752074~S

[Literature – Italian.]

✓ [34*.] Homeri Illias. 1v.

Homeri Illias. Ad optimorum liborum fidem
[35*] Massime e Sentenzi. 1v.


[Literature—Italian]

[36*] Schiller. 1v.


[Literature—German]

[37*] Xenophontis Anabasis. 1v.


Sig.; B:LL; 103871; 18 Ap. '02 AM; notes in ink.

http://library.sl.nsw.gov.au/record=b2752770~S2

[Classical literature – Greek]

[38*] Xenophontis Opera. 1v.


Sig.; B:LL; 103872; 18 Ap. '02 AM; notes in ink and pencil.

http://library.sl.nsw.gov.au/record=b2752833~S2

[Classical literature – Greek]
[39*.] Chansons. 2v.
Vol.1: B:LL; 103867; no transfer information.
Vol.2: B:LL; 103868; no transfer information.
http://library.sl.nsw.gov.au/record=b2752083~S2

[Music.]

[40*.] Gerusalemme Liberata. 2v.
Tasso, Torquato. *La Gerusalemme Liberata.* Firenze, 1826. 32mo.
Vol.2: Sig.; B:LL; 103866; 18 Ap. ’02 AM.
http://library.sl.nsw.gov.au/record=b2752070~S2

[Literature – Italian.]

[41*.] Dictionnaire de Poche. 1v.

[Languages – French.] Not Located.

[42.] Lebenslusse[?] nach Nuftseigender[?]. 1v.

Not Identified.

[43*.] German Grammar. 1v.

[Languages – German.] Not Identified.

[44*.] Die Naturlehre. 1v.

'A Leichhardt book'; Acc. No. 658; Transferred to the Free Public Library 14 Mar 1902 (AML Register, vol. 1).

[Science – Physics; Astronomy; Meteorology.]
[45*.] Dutch Greek Dictionary. 1v. There is mention of 'Kost Dutch Grechisches Worterbuch' in a 'list of books not specially claimed by Mr Krefft but put on one side because they did not contain the Museum stamp'. AM Archives: Report of the Sub-Committee on the private property of Mr Krefft in the museum, BB30.77/5, Appendix 3. Not identified. [Languages—Dutch and Greek]


1823.
B:LL; 103917; 21 Ap. ‘02 AM.
http://library.sl.nsw.gov.au/record=b1481961~S
2
[Earth Sciences – Geology – France.]

— ✓ [50*.] Description historique et scientifique de la Haute Auvergne. 1v.

Vol. 1: Sig. (shadow); B:LL; AML label on front pastedown; 103896; 21 Ap. ‘02 AM; a few pencil markings of text.
Vol. 2: See [68.] for information
http://library.sl.nsw.gov.au/record=b1512174~S
2
[Earth Sciences – Geology – France.]

— ✓ [51*.] Nouvelle Geographie de la France. 1v.

Sig.; B:LL; 103879; 18 Ap. ‘02 AM.
http://library.sl.nsw.gov.au/record=b2752210~S
2
[Geography – France.]

— ✓ [52*.] Herbart’s Allgemeine Metaphysik. 1v.

Sig.; B:LL; 103820; 22 Ap. ‘02 AM.
http://library.sl.nsw.gov.au/record=b2752299~S
2
[Psychology & Philosophy—Metaphysics.]

— ✓ [53*.] Géographie Generale comparée. 2v.

[Geography – Africa.]

— ✓ [54*.] La Géographie physique et botanique de Naples. 1v.

Sig.: B:PLNSW; 103881; 18 Ap. ’02 AM.
http://library.sl.nsw.gov.au/record=b2752873~S2

[Earth Sciences—Physical Geography.]

— ✓ [55*.] Schubarths Lerhbuch der Theoretisch [sic] Chemie. 1v.


[Chemistry & Allied Sciences – Physical & Theoretical Chemistry.]

— ✓ [56*.] Minutes in Agriculture and Planting. 1v.


[Technology & Applied Sciences – Agriculture.]

✓ [57*.] Introduction a l’Étude de la Botanique. 2v.

AMRL RB D580/CAN/RARE BOOKS Vol.1: B:LL; Acc. no. 405 Vol.2: B:LL; Acc. no. 405

[Botanical Sciences – Botany.]

— ✓ [58*.] Florae Romanae. 1v.

[59*] Ruthe’s Flora der Mark Brandenburg. 1v.


Sig.; B:LL; 103893; 21 Ap. ’02 AM; pressed flowers at pp.36-37.

http://library.sl.nsw.gov.au/record=b2752302~S2
[Botanical Sciences – Botany.]

[60.] Leichhardt’s specielle Botanik:m.s. 1v.


See ML MS card catalogue.

[61*] Studi di Geologi. 1v.


B:LL; 103887; 19 Ap. ’02 AM.

http://library.sl.nsw.gov.au/record=b2752147~S2
[Earth Sciences – Geology.]

[62*] Geologi von de la Beche. 1v.


Not located.
[Earth Sciences – Geology.]

[63*] Element der Krystallographie. 1v.


B:LL; 103878; 18 Ap. ’02.
[64*.] Formations géologiques du Département du Puy de Dome. 1v.

Lecoq, H. and J.-B. Bouillet. Vues et coupes des principales formations géologiques du département du Puy-de-Dôme, accompagnées de la description et des échantillons des roches qui les composent.

Vol.1: Sig. (shadow); B:LL; AML label on front board verso; 103892; 21 Ap. ’02 AM. [See no. 3A, Appendix F, Part 2, for details of related atlas.]

http://library.sl.nsw.gov.au/record=b2752064~S

[Chemistry & Allied Sciences – Crystallography.]

[65*.] The Province of Kemaon relative to geology. 1v.


Sig.; B:LL; 103899; 21 Ap. ’02 AM.


[Earth Sciences – Geology – India.]

[66*.] Topographie Minéralogique du Département du Puy de Dome. 1v.


Sig. (shadow); B:LL; AM Library label verso front board; 103897; 21 Ap. ’02 AM.

http://library.sl.nsw.gov.au/record=b1512175

[Earth Sciences – Geology – France.]

[67*.] Itinéraire du Département du Puy de Dome. 1v.


Sig.; B:LL; 103895; 18 Ap. ’02 AM.

✓ [68*] Description Historique et Scientifique de la Haute Auvergne. 1v.


Atlas: B:LL; AML label front board verso; 103882; 18 Ap. '02 AM; rear of plate 25 is a sedimentary cross-section in pencil.

See no. [50] for details of vol.1.

http://library.sl.nsw.gov.au/record=b1512174~S2

[General History—France.]

✓ [69*] Le vite de Pittori Scoltori et Architetti Genovesi. 1v.


Deaccessioned by the AML. **Not located.**

Acc. no. 374: cancelled, no reason given (AML register, vol. 1.)

[The Arts – Italy.]

✓ [70*] Allgemeine Musiklehre von A.B. Marx. 1v.


[Music.]

✓ [71*] Ichthyologie de Nice. (Risso). 1v.


Deaccessioned by the AML. **Not located.**


[Zoological Sciences – Cold-Blooded Vertebrates – France.]

✓ [72*] Voight's Zoologie—vol 2. 1v.

[Zoological Sciences.] **Not identified.**
‘List of Dr Leichhardt’s books in the Museum but not in the Library.’

<table>
<thead>
<tr>
<th>Transcription</th>
<th>Bibliographic Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>[81.] 12. M.S.</td>
<td>See ML MS card catalogue.</td>
</tr>
<tr>
<td>[82.] 1. portfolio drawings &amp; diagrams</td>
<td>See ML MS card catalogue.</td>
</tr>
<tr>
<td>[85.] 2. Dr. A. Kune’s.</td>
<td>Note: There is mention of ‘Kuner 2 vols’ in a ‘list of books not specially claimed by Mr Krefft but put on one side because they did not contain the Museum stamp’. AM Archives: Report of the Sub-Committee on the private property of Mr Krefft in the museum, BB30.77/5, Appendix 3. Not identified.</td>
</tr>
</tbody>
</table>
Duplicate? See no.[108]

[87*.] 1. Apolbonii Rhodii Argonautica
Sig.; B:Other; 103869; 18 Ap. '02 AM.
http://library.sl.nsw.gov.au/record=b1106475~S2
[Classical literature – Greek]

[88*.] 1. Méthode simple pour apprendre à préluder.
[Music.]

[89*.] 1. Sleeman on use of Portable Mathematical Instrmts.
Sig. 'Ludwig Leichhardt from Mr F[?]{r}ood'; B:Original; 103908; 21 Ap. '02 AM.
http://library.sl.nsw.gov.au/record=b2752830~S2
[Mathematics.]

[90.] 1. Procédés faunal.
Not identified.

[91*.] 1. Elementary Mathematics.
Sig.; B:Other; 'Public Library of NSW, received and accessioned 12 Dec. 1961. Donation; early AML stamp and 'Cancelled Australian Museum', titlepage: 'A.N 279'; notes in pencil on rear pastedown.
http://library.sl.nsw.gov.au/record=b2752045~S2
[Mathematics.]

[92*.] 1. Voyage à l'Île Julia.
[Earth Sciences – Geology.]

1. Une Expédition à la Baye Botanique.

Tinch [Tench], Watkin. *Relation d'une expédition à la Baye Botanique.*
Paris : Chez Knappen Fils, 1789.
AMRL RB D919.441042/TEN/RARE BOOKS
B:Other; Acc No. 10742. Note: AML register, vol. IV, acc. no. 10742:
'Retained from Leichhardt collection when it was sent to public library'.
[Geography and travel – Australia.]


[Medical Sciences & Medicine.] Not identified.

[97*] 1. Observations sur la structure et la formation de l'opercule.

B:PLNSW; 103891; 21 Ap. ’02 AM; some text marking in pencil, particularly relating to the Auvergne.
http://library.sl.nsw.gov.au/record=b2752138~S2


[94*] 1. École centrale des Arts et Manufactures.

[Social Sciences – Education.]

[95*] 1. Instruction pour les voyageurs.

Muséum Royal d’Histoire Naturelle. *Instruction pour les voyageurs et pour les employés dans les colonies, sur la manière de recueillir, de conserver et d'envoyer les objets d’histoire naturelle.* Paris : Belin, 1829. ML DSM/574.944/1C1
Sig.; B:Other; no accession number or transfer note; DS Mitchell bookplate; includes printed desiderata for 'Nouvelle-Hollande et Port Jackson'. Note: Possibly purchased by Mitchell from Krefft's estate.
[Life Sciences – Biology.]
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Author</th>
<th>Publication Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sig.; B:Other; 103880; 18 Ap. ’02 AM.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Geography and Travel]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Languages—German.]</td>
</tr>
</tbody>
</table>

Transcription

<p>| | |
|         |                                                                                                                         |
|         | Bibliographic Identification                                                                                           |
|         | Schiller, K.G.H. <em>Die Mittelalterliche Architektur Braunschweigs...</em>                                                   |
|         | 1852. SRL S720.9435/1                                                                                                 |
|         | Published after Leichhardt’s disappearance.                                                                           |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Author/Translator</th>
<th>Place of Publication</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Title</td>
<td>Author/Translator</td>
<td>Location/Date</td>
<td>Details</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
B: Original; 103912; 22 Ap. ‘02 AM.  
http://library.sl.nsw.gov.au/record=b2754149~S2 |
B:PLNSW; 103914; no transfer info; notes in ink.  
B:PLNSW; 103946; 23 Ap. ‘02 AM.  
http://library.sl.nsw.gov.au/record=b2754144~S2 |
| 118.  | Memorial Book of the fourth festival at Braunschweig. | Not identified. |
B:PLNSW; 103940; 22 Ap. ‘02 AM; only evidence of provenance is transfer details from AM in the t.p. gutter.  
http://library.sl.nsw.gov.au/record=b2205367~S2 |

[New page, unnumbered]
[Section 5. List of mss and seed collections. See Mitchell Library’s electronic and card manuscript catalogues for more information.]

[121.] M.S.S. of Overland journey from Moreton Bay to Pt. Essington 1844-45.

[122.] Maps or surveyors field book of do?

[123.] A Packet of various M.S.S.
(1) M.S.S. Review of Clinical Cases in the Clinic of Prof. Yungker[?]

[124.] (2) Extracts chiefly Geological from various authors in French and German

[125.] (3) Notes from Lectures on Insecta by Prof Audouin

[126.] (4) Lectures, notes on

[127.] (5) Botanical Lectures

[128.] (6) Lectures on Shells

[129.] (7) on Botany

[130.] (8) on Ornithology

[131.] (9) Botany

[132.] 10 Diary from 8th July 1840 to 9 Feb 1841
Trip to Auvergne, stay in Naples & first part of stay in Rome

[133.] 11 & 12 Note Books various subjects

[134.] 2 Letters from Leichhardt’s Father to Ludwig Leichhardt 4 May 1840, 6 “ 1840

[135.] 1 Letter fr. M. Nicholson to L. Mt Macedon Aug 1842


[137.] 1 Letter to L. from Sir Wm. Macarthur Camden 17th Aug 1846

[138.] July 1840 Certificate, course zoology, A Valencunnes
Certificate of Attending Lectures.

[139.] 1833 & 1834) on Philosophy by Professor Miller [Müller]
[140.] On the Comparison between Persian & Sanskrit by Prof Ewald

[141.] On German Grammar

[142.] On Zoology by Prof Valencunne

[143.] 1834 on Natural History by Blumenbach

[144.] on Botany by Bartling

[145.] on Physics by Webber

[146.] on Metaphysics by Harbarth

[147.] L’s Passport No 12328.

[148.] Dried—Plants

[149.] 14 Packages of Foreign Plants

[150.] 54 “ “ Australian do

[151.] 1 “ Old drawings maps &c.

[New page, unnumbered]
The Leichardt [sic] Books were transferred to the Public Library

See Trustees’ Minutes, 4th February, 1902
Exchange schedule No. of 1902
Cop Lists Nos. “
Letter No. “

Except the following Books which had been registered in the Museum Library:

57 Jauffret, F.F.  Zoographie   8vo  Paris

338 Risso, A.  Ichthyologie de Nice   8vo  Paris, 1810

367 Cook, J.  Voyage de Banck 4 vols   8vo  Paris, 1774

385 ————  Descriptions des Isles Canaries   8vo

405 Candolle, A. de  Introduction à l’Etude de la Botanique 2 vols 8vo  
                     Paris, 1855 [sic]

430 Amos, W.  Minutes in Agriculture   4to  Boston, 1810

2927 Griffith, Ed.  Vertebrated Animals   8vo  London, 1821

10742 Tinch, W.  Expédition à la Baye Botanique   8vo  Paris, 1789
Part Two: Additional Leichhardt volumes physically located but not included in the 1881 inventory.

[1A*.] Hufeland, Christoph Wilhelm. *Die Kunst das menschliche Leben zu verlängern*. Jena: In der akademische Buchhandlung, 1798. ML RB/S612.68/5 (2 v. in 1)
B:Other; 103939; transfer info. lost in binding repairs?. Provenance from SLNSW electronic catalogue.
[Applied Science & Technology—Human Physiology.]

London: Printed for Baldwin, Cradock, and Joy : Rodwell and Martin, 1821. AMRL D596/GRI/RARE COMP
B:LL; Acc. no. 48. [See no. [74] for details of volume 1.]
[Zoological Sciences – Vertebrates.]

B: later buckram; some notes in pencil; TP verso gutter: '12/9/81 9/-/-'. Front endpaper note by Gerard Krefft, Curator of the AM. See p.10 of this article for transcription. [See no. 64, Appendix F, Part 1, for details of vol.1.]
[Earth Sciences – Geology – France.]

Vol.2: Sig. (shadow); B:PLNSW; 103904; 21 Ap. ‘02 AM.
Vol.3: Sig. (shadow); B:PLNSW; 103905; 21 Ap. ‘02 AM. FFEP signed ‘William Nicholson’.
Vol.4: Sig.; B:Original paper-covered boards; 103906; 21 Ap. ‘02 AM.
Vol.5: Sig.; B:Original paper-covered boards; 103907; 21 Ap. ‘02 AM.
[Zoological sciences.]

[Classical literature – Roman.]
B:PLNSW; 103876; 18 Ap. '02 AM. No additional indications of provenance. [Languages – Italian/German.]

[7A.*] Société Géologique de France. Réunion extraordinaire à Grenoble du 1er au 11 Septembre, 1840. SRL S550/1
Bound with no. 48, Appendix F, Part 1, and other non-Leichhardt geology pamphlets; notes and underlining in ink; '[Leichhardt Relics; bound with Pilla, L. Osservazione Geognostiche.]', (Supp. Cat. 1901-1905).
[Earth Sciences – Geology – France.]
### Part Three: Books Associated with Leichhardt's European Field Trip, 1841–42.

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>[29.] Mérat, V.F. <em>Nouvelle flore des environs de Paris</em>, 1836. 2v.</td>
</tr>
<tr>
<td>Notes</td>
</tr>
<tr>
<td>General text relevant to the tour.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
</tr>
<tr>
<td>General text relevant to the tour.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
</tr>
<tr>
<td>General text relevant to the tour.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
</tr>
<tr>
<td>General text relevant to the tour.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>[9.] <em>Idelers Italianische Sprache</em>. 1v.</td>
</tr>
<tr>
<td>Notes</td>
</tr>
<tr>
<td>Spring 1840: L.L begins to study Italian (Aurousseau, p.403.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
</tr>
<tr>
<td>28 September, 1840: Visits Puy-de-Dôme (Aurousseau, p.403.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>[67.] <em>Itinéraire du département du Puy-de-Dôme</em>, 1831.</td>
</tr>
<tr>
<td>Notes</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>[97.] Dugès, A. <em>Observations sur la structure et la formation</em></td>
</tr>
<tr>
<td>Notes</td>
</tr>
<tr>
<td>Some text marking in pencil,</td>
</tr>
</tbody>
</table>


[48.] Pilla, L. *Osservazioni geognostiche che possonsi fare lungo la strada da Napoli a Vienna*, 1834.


particularly relating to the Auvergne.

1 November 1840: Arrives in Genoa.


16 February 1841: Rome. Reads Schübler’s *Meteorology*.

28 May 1841: Grenoble. ‘The société géologique held its extraordinary meeting at Grenoble last September, and I visited several places which it had under discussion’.
Appendix G: William Swainson Library Purchased by the AML, 1858.

Books with Confirmed Provenance

<table>
<thead>
<tr>
<th>A/N</th>
<th>Author</th>
<th>Title, place and publisher</th>
<th>Year</th>
<th>Vols.</th>
<th>Subj</th>
<th>Format</th>
<th>Location</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>8154-8163</td>
<td>Linneaus, Carl</td>
<td><em>Systema Naturae par Regna tria Naturae Secundum Classes</em>, Lipsiae: G.E. Beer.</td>
<td>1788-93</td>
<td>10</td>
<td>G</td>
<td>MS</td>
<td>75A/6-15 OC Comp</td>
<td>Signed: ‘William Swainson’ (vol 1, parts 1 &amp; 4 only). Register note: acc. nos. 8154-63, 22 May 1896, How received: “Books with old Museum stamp, discovered by a dealer at a pawn auction sale, and repurchased from him. Are duplicates of books already in the library—but being a better copy are put on shelves. Swainson’s copy.” [Probably left AML prior to 1883 as had no accession number. Did Gerard Krefft have this set at home? His wife, Annie Krefft, was selling off Leichhardt mss in 1895.]</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>---------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>21</td>
<td>Cetti, Francesco</td>
<td><em>Uccelli di Sardegna</em>, Sassari: Giuseppe Piattoli Stampatore.</td>
<td>1776</td>
<td>1</td>
<td>A2</td>
<td>M</td>
<td>UDC 598.2(459.1) CET</td>
<td>Bookplate; signature (cut down); TP: &quot;W. Swainson 1812&quot;; Swainson stag binding.</td>
</tr>
<tr>
<td>23</td>
<td>Latham, John</td>
<td><em>General Synopsis of Birds</em>, London: Printed for Benj. White.</td>
<td>1781-1802</td>
<td>10</td>
<td>A2</td>
<td>M</td>
<td>D598.012/LAT/RARE BOOKS</td>
<td>Swainson bookplate on some vols; also numerous annotations. 1883 cat. lists 10 vols., but this is including 2 vols of <em>Index Ornithologicus</em> (RB D598.012/LAT/RARE BOOKS); Bought from Latham? In vol. 1 Swainson has pasted an envelope addressed to him in Latham’s handwriting.</td>
</tr>
<tr>
<td>33</td>
<td>Illigeri, Caroli</td>
<td><em>Prodromus Systematis Mammalium et Avium</em>. Berolini: Sumptibus C. Salfeld.</td>
<td>1811</td>
<td>1</td>
<td>A1</td>
<td>M</td>
<td>75H/7 OC Comp</td>
<td>Signed: William Swainson 1826; Now rebound alone but previously bound with Vieillot’s <em>Analyse d’une Ornithologie</em>, Paris, 1816 (acc. no. 33 also). See next item.</td>
</tr>
<tr>
<td>33 now 23656</td>
<td>Vieillot, L.P.</td>
<td><em>Analyse d’une Nouvelle Ornithologie Élémentaire</em>, Paris: Deterville.</td>
<td>1816</td>
<td>1</td>
<td>A2</td>
<td>M</td>
<td>A4C23</td>
<td>BFEP: ‘William Swainson, a present from his friend the author’. [Bound with previous item. J.C. Temminck wrote a pamphlet accusing Vieillot of plagiarising Illiger —is this why they were bound together?]</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>58</td>
<td>Forskål, Petrus</td>
<td><em>Descriptiones Animalium, Hauniae: Ex officina Mölleri. Apud Heineck et Faber.</em></td>
<td>1775</td>
<td>1</td>
<td>M</td>
<td>75G/30</td>
<td>Swainson’s handwriting on one of the endpapers in pencil (distinctive ‘p’).</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>Linne, Caroli A.</td>
<td><em>Systema Naturae per Regna tria Naturae cura J.F. Gmelin, Lugdini: Apud J.B. Delamolliere.</em></td>
<td>1789-1796</td>
<td>7</td>
<td>G</td>
<td>M</td>
<td>75A16-22</td>
<td>Annotations in Swainson’s handwriting, particularly pp. 3340-3341</td>
</tr>
<tr>
<td>76</td>
<td>Fabricius, J. C.</td>
<td><em>[Opera Omnia. Hamburg] Below is a separate listing of individual titles:</em></td>
<td>1778-1805</td>
<td>19</td>
<td>A8</td>
<td>MS</td>
<td>RB D097 FAB Rare Books 75G1-19</td>
<td>Swainson bookplate: Vols: all but vol. 5; sig.: Vols: 2, 4, 6 (‘1809’), 7 &amp; 9, 11 (‘1806’), 10, 14, (‘Genoa August 1814’), 15 (‘Pacerino Dec 1814’); Includes annotations; Swainson crested binding.</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>76</td>
<td>Fabricius, J. C.</td>
<td><em>Systema Entomologiae Sistens Insectorum</em>, Flensburgi et Lipsiae: in officina libraria Kortii.</td>
<td>1775</td>
<td>2</td>
<td>A8</td>
<td>M</td>
<td>75G2-3</td>
<td></td>
</tr>
<tr>
<td>76</td>
<td>Fabricius, J. C.</td>
<td><em>Systema Eleutheratorum</em>, Kiliae: impensis Bibliopolii Academici novi.</td>
<td>1801</td>
<td>2</td>
<td>A8</td>
<td>M</td>
<td>75G16-17</td>
<td></td>
</tr>
<tr>
<td>76</td>
<td>Fabricius, J. C.</td>
<td><em>Systema Pietzatorum</em>, Brunsvigae: Carolum Reichard.</td>
<td>1804</td>
<td>1</td>
<td>A8</td>
<td>M</td>
<td>75G18</td>
<td>TP: “Genoa August 1814”. Text block trimmed, only bottom of Swainson’s sig. left. This indicates that Swainson’s books were custom bound after 1814.</td>
</tr>
<tr>
<td>76</td>
<td>Fabricius, J. C.</td>
<td><em>Systema Antliatorum</em>, Brunsvigae: Apud Carolum Reichard.</td>
<td>1805</td>
<td>1</td>
<td>A8</td>
<td>M</td>
<td>75G19</td>
<td>TP: “W. Swainson Pacerino[?] Dec 1814”</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>78</td>
<td>Lamarck, M. de</td>
<td><em>Histoire Naturelle des Animaux sans Vertèbres</em>, Verdière: Paris.</td>
<td>1815</td>
<td>9</td>
<td>A8</td>
<td>M</td>
<td>RB MALAC 4A3 LAM; RB D592 LAM RARE BOOKS</td>
<td>Signature, Bookplate &amp; ’Swainson marbling’ on edges; One vol. in RB Dewey; Vol 2: HT: “William Swainson” and bookplate; vol. 5: Index of Genera; Vol 6: pp. 1-2 annotations plus uncloured plate from Swainson’s <em>Zoological Illustrations</em> inserted as notepaper (series 1, vol. 1, Meropsurica Javanese Bee-eater, plate 20); vol. 7: Extensive annotations.</td>
</tr>
<tr>
<td>91</td>
<td>Fleming, John</td>
<td><em>Philosophy of Zoology, or General View of the Structure, Functions, and Classification of Animals</em>, Edinburgh: A. Constable.</td>
<td>1822</td>
<td>2</td>
<td>A9</td>
<td>M</td>
<td>75G26-27 OC Comp</td>
<td>Signature vol. 1; vol 2: extensive evidence of use and Swainson writes “nonsense” against text with which he disagrees.</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>290 [now 3754]</td>
<td>Smith, J. E.</td>
<td><em>Specimen of the Botany of New Holland. Vol. I,</em> London: Printed by J. Davis; Published by J. Sowerby.</td>
<td>1793</td>
<td>1</td>
<td>B</td>
<td>M</td>
<td>Not located</td>
<td>1st AML stamp; Not seen but bound with Lewin which appears to have Swainson writing; Bound with Mann &amp; Lewin.</td>
</tr>
<tr>
<td>290 [now 3755]</td>
<td>Lewin, J.W.</td>
<td><em>Natural History of Lepidopterous Insects of New South Wales,</em> London: T. Bensley.</td>
<td>1805</td>
<td>1</td>
<td>E</td>
<td>M</td>
<td>RB D096.1 LEW Rare Books</td>
<td>Bound with Mann &amp; Smith; In pencil on last page: ‘The descriptions are by McL’ - see Horsfield’s <em>Indian Lepidoptera</em> pp. 19 &amp; 37 for similar writing - uses the ‘McLeay form of spelling, distinctive ‘d’ too.</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>-----------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>290</td>
<td>Mann, D. D.</td>
<td><em>Present Picture of New South Wales, London: Sold by John Booth. [Plan; the colour plates wanting]</em></td>
<td>1811</td>
<td>1</td>
<td>E</td>
<td>M</td>
<td>RB D994.02 MAN RARE BOOKS</td>
<td>1st AML stamp; No internal evidence but previously bound with Lewin Lepidoptera which appears to have Swainson writing; Bound with Smith &amp; Lewin.</td>
</tr>
<tr>
<td>410</td>
<td>Bernardino ab Ucria, P. F.</td>
<td><em>Hortus Regius Panhormitanus, Panormi: Tipis regii.</em></td>
<td>1789</td>
<td>1</td>
<td>B</td>
<td>M</td>
<td>RB D097 BER Rare Books</td>
<td>TP: ‘William Swainson from the author’</td>
</tr>
<tr>
<td>414</td>
<td>Linne, C. A.</td>
<td><em>Mantissa Plantarum, Holmiae: Impensis direct. Laurentii Salvii.</em></td>
<td>1771</td>
<td>1</td>
<td>B</td>
<td>M</td>
<td>RB D578.012 LIN</td>
<td>No annotations; rebound, but edges of text block match the rest of Swainson’s Linnaeus set.</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>436</td>
<td>Scopoli, J. A.</td>
<td><em>Entomologia Carniolica</em>, Vindobonae: Typis Ioannis Thomae Trattner.</td>
<td>1763</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB D097 SCO Rare Books</td>
<td>Swainson bookplate; TP: &quot;W. Swainson&quot; (juvenile sig.? see acc no 76).</td>
</tr>
<tr>
<td>438</td>
<td>De Geer, C. L. B.</td>
<td><em>Genera et Species Insectorum</em>, Lipsiae: Apud Siegfried Lebrecht Crusium.</td>
<td>1783</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB D097 GEE Rare Books</td>
<td>Swainson bookplate. Since rebound.</td>
</tr>
<tr>
<td>443</td>
<td>Haworth, A. H.</td>
<td><em>Lepidoptera Britannica</em>, Sistens Digestionem Novam Insectorum Lepidoptiorum, quae in Magna Britannia Reperiunter, London: J. Murray.</td>
<td>1803</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB D097 HAW Rare Books</td>
<td>Signed twice on FEPs</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>--------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>--------</td>
<td>-------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>513</td>
<td>Sowerby, J.</td>
<td><em>British Miscellany, or Coloured Figures of New, Rare, or Little Known Animal Subjects, Many Not Before Ascertained to be Inhabitants of the British Isles Vol. I</em>, London: Printed by R. Taylor.</td>
<td>1806</td>
<td>1</td>
<td>A8</td>
<td>M</td>
<td>RB D508.0941 SOR RARE BOOKS</td>
<td>Swainson bookplate, spine and marbling.</td>
</tr>
<tr>
<td>540</td>
<td>Harris, M.</td>
<td><em>Exposition of English Insects</em>, London: Sold by Mr. White ..., &amp; Mr. Robson ...</td>
<td>1782</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB D096.1 HAR Rare Books</td>
<td>Signature: 'William Swainson 1816'; Annotations on plates.</td>
</tr>
<tr>
<td>544</td>
<td>Fuessly, J. G.</td>
<td><em>Archives de l'Histoire des Insectes</em>, Winterthour: J. Ziegler.</td>
<td>1794</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB D096.1 FUE Rare Books</td>
<td>Some annotations on plates; Col. Bookplate; Stag binding, Swainson marbling; Looks water damaged; exquisite plates.</td>
</tr>
<tr>
<td>549</td>
<td>Drury, D.</td>
<td><em>Illustrations of Natural History. Exotic Insects, According to their Different Genera</em>, London: Printed for the Author.</td>
<td>1770-73</td>
<td>2</td>
<td>A6</td>
<td>M</td>
<td>RB D096.1 DRU Rare Books</td>
<td>ID based on pencil handwriting throughout on plates; '1831' written above date in vol. 2 (see Merian, A/N 801 for note re 1831 ).</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>-----------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>552</td>
<td>Roemer, J. J.</td>
<td><em>Genera Insectorum Linnaei et Fabricii</em>, Vitoduri, Helvetorum: Apud Henric Steiner et Socios.</td>
<td>1789</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB 592/ROE Rare Books</td>
<td>Signature and bookplate.</td>
</tr>
<tr>
<td>553</td>
<td>Coquebert, A. J.</td>
<td><em>Illustratio Iconographica Insectorum quae in Musaeis Parisinis Observavit et in Lucem Edidit J. C. Fabricius</em>, Parisiis: Typis Petri Didot Natu Majoris.</td>
<td>1798-1804</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB D096.1 COQ Rare Books</td>
<td>Swainson's bookplate; typical brown and blue marbling.</td>
</tr>
<tr>
<td>557</td>
<td>Horsfield, Thomas</td>
<td><em>Descriptive Catalogue of the Lepidopterous Insects in the Museum of the East India Company, Part I</em>, London: Parbury, Allen &amp; Co.</td>
<td>1828</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB ENTOM 168AD10</td>
<td>TP: “William Swainson”; T.P. verso ms sketch of Quinary system relating to lepidoptera - incomplete; good examples of Swainson’s handwriting...</td>
</tr>
<tr>
<td>560</td>
<td>Stoll, Caspar</td>
<td><em>Natuurlyke en Naar ’t Leeven Naauwkeurig Gekleurde Afbeeldingen en Beschryvingen der Wantzen, in alle vier Waereld’s Deelen Europa, Asia, Africa en America Huishoudende</em>, Amsterdam: Jan Christiaan Sepp.</td>
<td>1788</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB D096.1 STO Rare Books</td>
<td>FFEP: &quot;William Swainson 1816 F.L.S&quot;; some annotations; binding missing spine.</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>-----------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>726</td>
<td>Schröter, J. S.</td>
<td><em>Einleitung in die Conchyliekenkenntniss nach Linné</em>, Halle: bei Johann Jacob Gebauer.</td>
<td>1782-6</td>
<td>3</td>
<td>A5</td>
<td>M</td>
<td>RB MALAC 4A5 SCH</td>
<td>FFEP vol. 1: ‘William Swainson’; ex British Museum - stamps &amp; ‘1831 duplicate for sale’ stamp; BL call no. ‘GAL8EC9AAB’ on all TPs; earlier annotations in German; Cited in <em>Rise and Progress of Zoology</em>, p. 59</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>750</td>
<td>Bloch, M.E.</td>
<td><em>Icthyologie, ou Histoire Naturelle: des Poissons</em>, Berlin: chez l’auteur.</td>
<td>1796</td>
<td>6</td>
<td>A4</td>
<td>M</td>
<td>RB FISH 166 BLO</td>
<td>Part 5, plate 57 handwritten ’Mullus sermuleutus. Cepede’. ’M’ definitely Swainson also numeral ’57’ see handwriting in acc no. 19567; Also Part 5, plates 5, 23, 59 for more annotations; Cited in <em>Rise and Progress of Zoology</em>, p. 62</td>
</tr>
<tr>
<td>800</td>
<td>[Seba, Albertus]</td>
<td><em>Shells. Volume of Plates [A selection of plates without text from Descriptio Thesauri Rerum Naturalium, Annotated by W. Swainson (from researches by Mr C.Hedley)], Amsterdam: [s.n.].</em></td>
<td>1758</td>
<td>1</td>
<td>A5</td>
<td>M</td>
<td>RB Folio SEB MALAC Folio Rare Books</td>
<td>Charles Hedley attribution and Swainson’s handwriting of notes. However, Swainson notes that an edition of plates without text was published in Paris in c.1835, <em>Taxidermy</em>, p. 323.</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>-----------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>801</td>
<td>Merian, Mariam Sibyllam</td>
<td><em>Metamorphosis Insectorum Surinamensium in qua Erucae ac Vermes Surinamenses, cum Omnibus suis Transformationibus, ad Vivum Delineantur et Describuntur Singulis Eorum in Plantas, Flores, et Fructus Collocatis in Quibus Reperta sunt; Tum Etiam Generatio ran Omnia in America ad Vivum Naturali Magnitudine Picta Atque Descripta</em>, Amsterdam: Gerardum Valk.</td>
<td>1705</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB D595.709883 MER</td>
<td>Signed on T.P.: ‘William Swainson, 1806; ‘Dru Drury 1790’. T.P. note in WS hand[?]': 'effectually used in 1831, 25 years after' [1806]; occasional pencil annotations. The usefulness mentioned above is confirmed in <em>Zoological Illustrations</em> vol.3, 2nd series, 1832-33, p.93: PROTESILAUS Leilus, Protesilaus Butterfly. Pap. Protesilaus. Lin. Fab. Ent. sys. 3. pl. p. 23. Ency. Meth. p. 50. Merian Sur. pl. 43. Cramer, pl. 202. f. a. b. Madam Merian’s valuable work on the Insects of Surinam, has furnished us with a figure of the larva; which, unlike that of the European Swallow-tails, is covered with spines : the chrysalis also departs from the usual type of the family, in having the head directed downwards. These facts we have verified by an inspection of the original drawings, of M. Merian, now deposited in the British Museum. These are all important variations in structure, which can only be explained by the natural system.</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>------</td>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>-------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>19567</td>
<td>Wood, W.</td>
<td><em>Index Testaceologicus; or a Catalogue of British and Foreign Shells</em>, London: Printed for W. Wood.</td>
<td>1828</td>
<td>1</td>
<td>A5</td>
<td>M</td>
<td>RB MALAC 4A6 WOO</td>
<td>Swainson marbling; Index of Genera in Swainson’s handwriting at front; ‘Presented by HC Hedley’ [picked it up while working at AM or purchased elsewhere?]</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols.</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>----------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[No mention of earlier accession no. in register.]</td>
</tr>
<tr>
<td>11</td>
<td>Pennant, Thomas</td>
<td><em>Genera of Birds</em>, London: B. White.</td>
<td>1781</td>
<td>1</td>
<td>A2</td>
<td>M</td>
<td>RB LARGE ORNITH A4C25</td>
<td>1st AML stamp; Swainson? No evidence of ownership; Cited in <em>Rise and Progress of Zoology</em>, p. 50</td>
</tr>
<tr>
<td>35</td>
<td>Temminck, J.C.</td>
<td><em>Manuel d’Ornithologie</em>, Amsterdam: J.C. Sepp; Paris: G. Dufour.</td>
<td>1815</td>
<td>1</td>
<td>A2</td>
<td>M</td>
<td>RB D598 TEM RARE BOOKS</td>
<td>1st AML stamp; No annotations or original binding; Cited in <em>Rise and Progress of Zoology</em>, p. 90</td>
</tr>
<tr>
<td>413</td>
<td>Cupani, F.</td>
<td><em>Hortus Catholicus, et Supplementum</em>, Neapoli: Apud Franciscum Benzi.</td>
<td>1696-7</td>
<td>1</td>
<td>B</td>
<td>M</td>
<td></td>
<td>1st AML stamp; no annotations; Italian publications accessioned this early tend to be Swainson...</td>
</tr>
<tr>
<td>442</td>
<td>Paykull, G.</td>
<td><em>Fauna Sueca</em>, Upsaliae: John F. Edman.</td>
<td>1798</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>168AA25 [C]</td>
<td>1st AML stamp; Arabic date written in ink on T.P.; no sig.; Cited in <em>Rise and Progress of Zoology</em>, p. 72</td>
</tr>
<tr>
<td>A/N</td>
<td>Author</td>
<td>Title, place and publisher</td>
<td>Year</td>
<td>Vols</td>
<td>Subj</td>
<td>Format</td>
<td>Location</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----</td>
<td>--------------</td>
<td>-----------------------------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>--------</td>
<td>-------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>452</td>
<td>Prunner, L.</td>
<td><em>Lepidoptera Pedemontana, Augusta Taurinorum:</em> Mathaeus Guaita.</td>
<td>1798</td>
<td>1</td>
<td>A6</td>
<td>M</td>
<td>RB ENTOM 168AC15</td>
<td>1st AML stamp; No annotations, but all early material relating to Italy appears to come from Swainson.</td>
</tr>
</tbody>
</table>
# Appendix H: The *Thylacoleo carnifex* Debate as Reflected by the AML Collection, 1861-1883.

<table>
<thead>
<tr>
<th>Date</th>
<th>Author</th>
<th>Title</th>
<th>Discussion</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S. Macleay</td>
<td>'The Native 'Lion' of Australia', <em>SMH</em>, 1 January.</td>
<td>Having observed AM specimens, suggests it is a herbivore.</td>
<td>Not republished in British scientific press.</td>
</tr>
<tr>
<td>1865</td>
<td>R. Owen</td>
<td><em>On the Fossil Mammals of Australia</em> - Pt. 2. Description of an almost entire Skull of <em>Thylacoleo carnifex</em> (Owen)... <em>Phil. Trans. Roy. Soc., Lon.</em>, vol. 156, p. 73-82, pls. 3-4.</td>
<td>Describes specimen supplied by Edward Hill, AM trustee, as well as photographs supplied by Krefft of AM specimen. Full description of dentition.</td>
<td>Not in the AML but seen by Krefft: 'Prof. Owen has given us a full description of the teeth of this animal', Krefft (1866).</td>
</tr>
<tr>
<td>Date</td>
<td>Author</td>
<td>Title</td>
<td>Discussion</td>
<td>Comments</td>
</tr>
<tr>
<td>-------</td>
<td>--------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>1866</td>
<td>&quot;</td>
<td>‘On the Dentition of the <em>Thylacoleo carnifex</em> (Ow.)’, <em>Ann. Mag. Nat. Hist.</em>, 3rd series, vol. 18, pp. 148-149</td>
<td>Has reconstructed a skull from fragments, provides illustrations and concludes that the animal could not have been carnivorous.</td>
<td>AML current subscription; arrived 1866-67.</td>
</tr>
<tr>
<td>1870</td>
<td>G. Krefft</td>
<td>Guide to the Australian Fossil remains... arranged and named by Gerard Krefft. Sydney.</td>
<td>Produced to mark the finds of the 1869 exploration of the Wellington Caves by Krefft and Thomson.</td>
<td>Lithographs were completed but never published.</td>
</tr>
<tr>
<td></td>
<td>&quot;</td>
<td>‘On the Restoration of the lower Incisor of <em>Thylacoleo carnifex</em> (Owen); and on the fossil remains of the herbivorous Marsupials in the Australian Museum, Sydney’. <em>Quart. J. Geol. Soc., Lon.</em>, vol. 26, pp. 415-416.</td>
<td>Krefft sent a model and photographs of his reconstruction to be discussed at the Society. Owen was questioned by a number of members about his carnivore claim at the meeting.</td>
<td>AML current subscription; arrived 1870-71.</td>
</tr>
<tr>
<td>1872</td>
<td>G. Krefft</td>
<td>‘Letter to the Editor’, <em>Sydney Mail</em>, 5 October, p. 422.</td>
<td>Krefft claims support from Darwin, Grey and Flower and the latter suggests the debate has closed.</td>
<td></td>
</tr>
<tr>
<td>1873</td>
<td>W.H. Flower</td>
<td>‘Hunterian Lectures by Prof. Flower: Lectures IV, V, VI’, <em>Nature</em>, vol. 7, 6 March, p. 349.</td>
<td>Says that Krefft was the first to question Owen’s classification of the <em>Thylacoleo</em>.</td>
<td>AML current subscription.</td>
</tr>
<tr>
<td>Date</td>
<td>Author</td>
<td>Title</td>
<td>Discussion</td>
<td>Comments</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>-------</td>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td>&quot;</td>
<td>G. Krefft</td>
<td>'Fossil Mammals of Australia: A Review of Professor Owen's papers on this subject', <em>Sydney Mail</em>, August 23; <em>Verhandl. K.K. Geol. Reichanstalt (Wien)</em>, vol. 23, 1873, p. 301.</td>
<td>Krefft has not seen any of these papers (including earliest Thylacol. papers). Like Flower (1868) he discusses plate 13, fig. 6 (Owen 1859).</td>
<td>A reprint of Krefft's review is listed in the 1883 AML catalogue but no longer survives.</td>
</tr>
<tr>
<td>1887</td>
<td>R. Owen</td>
<td>‘Additional Evidence of the Affinities of the Extinct Marsupial Quadruped <em>Thylacoleo carnifex</em> (Owen)', <em>Phil Trans R Soc B</em>, vol. 178, pp. 1-3.</td>
<td>Owen was still trying to set the record straight. Krefft had died in 1881 and Owen was 83 years old. Owen differentiates between 'Mr Krefft' and 'contemporary palaeontologists' and 'eminent authors' Dr Falconer and Professors Flower and Boyd Dawkins.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix I: Detailed Database Analyses.

The description and analysis of the database results in Chapter Six, ‘Creating the Canon’, are based on the summary results reported in six tables.

Table 10. Collection Accessions: Periodised Comparison, 1836–1883, summarises the number of titles and volumes accessioned; accession method (purchases or donations) and the country from where they were sourced; country and language of publication; publication date; format (serial or monograph); number of titles deaccessioned; and number of illustrated titles.

Table 11. Collection Accessions: Cumulative Growth, 1836–1883, summarises the same items as in Table 10 but illustrates the cumulative growth of the collection by successively adding accessions from one period to the next. For example, while Table 10 compares the proportion of Australian publications accessioned within each time period: 1836–53 (17% of all titles accessioned), 1854–63 (2%), 1864–73 (24%) and 1874–83 (16%), this table shows the steady proportional increase of Australian publications across the collection over time: 1836–63 (3%) → 1836–73 (7%) → 1836–83 (11%).

Table 12. Collection Accessions by Subject: Periodised Comparison, 1836–1883, provides a breakdown of accessions over time by subject area as defined by the 1883 catalogue. This subject data, which includes a generalised periodical section - Class D - is then presented in a redistributed form with titles either in Class D or subject ‘unspecified’ being allocated to a more specific subject area.¹ This table also includes a more detailed subject breakdown of titles listed under ‘Class A Zoology’.

¹ This rather unsatisfactory mix of format was common practice. Serials were often bundled together in such catalogues and while many of the scientific journals cover multiple subject areas (which I have reallocated to ‘A8 General Zoology’ or ‘G. General Science’), there are also subject specific examples such as the ornithological journal, Ibis.
Table 13. Collection Accessions by Subject: Cumulative Growth, 1836–1883, is based on Table 12 results but shows the varying influence of each item as the collection develops over time.

A detailed analysis of the accessions made at the time of the first library endowment, 1860–61, is shown in Tables 14 and 15. These tables reproduce the fields included in Tables 10 and 12 and enable further discussion about the foundation collection which was poorly documented at the time.

Key for Subject Abbreviations used in Tables 12, 13 and 15.
Subject categories have been taken from the Catalogue of the Library of the Australian Museum (1883), page [3]:

A. Zoology
   A1 Mammalia
   A2 Aves
   A3 Rept/Amph
   A4 Pisces
   A5 Mollusca
   A6 Insecta etc.
   A7 Echin. etc
   A9 Comp. Anat

B. Botany

C. Geol. etc

D. Proc. etc

E. Voyages

F. Ency. etc

G. Gen. Sc.

H. Misc.

A. Zoology  Zoology and Comparative Anatomy
   A1 Mammalia  Mammalia
   A2 Aves  Aves
   A3 Rept/Amph  Reptilia and Amphibia
   A4 Pisces  Pisces
   A5 Mollusca  Mollusca
   A6 Insecta etc.  Insecta, Arachnida, Myriapoda, and Crustacea
   A7 Echin. etc  Echinodermata, Vermes etc.
   A9 Comp. Anat  Comparative Anatomy and Physiology

B. Botany  Botany

C. Geol. etc  Geology, Palaeontology, and Mineralogy

D. Proc. etc  Periodicals, Proceedings and Reports of Societies, and Museum Catalogues

E. Voyages  Voyages and Travels, and Topographical Works

F. Ency. etc  Encyclopaedias, Dictionaries, and Works of Reference

G. Gen. Sc.  General Science

H. Misc.  Miscellaneous Works
Table 10. Collection Accessions: Periodised Comparison, 1836–1883

<table>
<thead>
<tr>
<th>Accession Method:</th>
<th>1836–53</th>
<th>1854–63</th>
<th>1864–73</th>
<th>1874–83</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Purchase</td>
<td>0</td>
<td>0</td>
<td>193</td>
<td>39</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>Donation</td>
<td>9</td>
<td>50</td>
<td>154</td>
<td>31</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>Accident</td>
<td>9</td>
<td>50</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>142</td>
<td>29</td>
<td>93</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100</td>
<td>490</td>
<td>100</td>
<td>147</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purchase Source:</th>
<th>1836–53</th>
<th>1854–63</th>
<th>1864–73</th>
<th>1874–83</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Britain</td>
<td>0</td>
<td>0</td>
<td>97</td>
<td>50</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Australia</td>
<td>0</td>
<td>0</td>
<td>35</td>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0</td>
<td>0</td>
<td>61</td>
<td>32</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>33</td>
<td>92</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>193</td>
<td>100</td>
<td>36</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Donation Source:</th>
<th>1836–53</th>
<th>1854–63</th>
<th>1864–73</th>
<th>1874–83</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Britain</td>
<td>0</td>
<td>0</td>
<td>112</td>
<td>73</td>
<td>9</td>
<td>53</td>
</tr>
<tr>
<td>Australia</td>
<td>9</td>
<td>100</td>
<td>31</td>
<td>20</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Austria</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>United States</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>France</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>100</td>
<td>154</td>
<td>100</td>
<td>17</td>
<td>100</td>
</tr>
</tbody>
</table>
### Source of Purchases and Donations combined

<table>
<thead>
<tr>
<th></th>
<th>1836–53</th>
<th>1854–63</th>
<th>1864–73</th>
<th>1874–83</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Britain</td>
<td>0</td>
<td>0</td>
<td>209</td>
<td>62</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td>Australia</td>
<td>9 100</td>
<td>66</td>
<td>19</td>
<td>6</td>
<td>11</td>
<td>38</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0 0</td>
<td>61</td>
<td>18</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Austria</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0 0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>United States</td>
<td>0 0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>France</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>34</td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td>9 100</td>
<td>347</td>
<td>101</td>
<td>53</td>
<td>100</td>
<td>325</td>
</tr>
</tbody>
</table>

### Country of Publication:

<table>
<thead>
<tr>
<th></th>
<th>1836–53</th>
<th>1854–63</th>
<th>1864–73</th>
<th>1874–83</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Australia</td>
<td>3 17</td>
<td>9</td>
<td>2</td>
<td>36</td>
<td>24</td>
<td>76</td>
</tr>
<tr>
<td>Britain</td>
<td>3 17</td>
<td>328</td>
<td>67</td>
<td>76</td>
<td>52</td>
<td>180</td>
</tr>
<tr>
<td>France</td>
<td>4 21</td>
<td>48</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Germany</td>
<td>2 11</td>
<td>30</td>
<td>6</td>
<td>11</td>
<td>7</td>
<td>75</td>
</tr>
<tr>
<td>Austria</td>
<td>1 6</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Italy</td>
<td>1 6</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>NZ</td>
<td>0 0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>India</td>
<td>3 17</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>United States</td>
<td>1 6</td>
<td>23</td>
<td>5</td>
<td>10</td>
<td>7</td>
<td>38</td>
</tr>
<tr>
<td>Other</td>
<td>0 0</td>
<td>34</td>
<td>7</td>
<td>7</td>
<td>5</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>18 101</td>
<td>490</td>
<td>101</td>
<td>147</td>
<td>100</td>
<td>466</td>
</tr>
</tbody>
</table>

### Language of Publication:

<table>
<thead>
<tr>
<th></th>
<th>1836–53</th>
<th>1854–63</th>
<th>1864–73</th>
<th>1874–83</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>English</td>
<td>9 50</td>
<td>364</td>
<td>74</td>
<td>127</td>
<td>87</td>
<td>335</td>
</tr>
<tr>
<td>French</td>
<td>4 21</td>
<td>60</td>
<td>12</td>
<td>5</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>German</td>
<td>3 17</td>
<td>24</td>
<td>5</td>
<td>11</td>
<td>8</td>
<td>78</td>
</tr>
<tr>
<td>Italian</td>
<td>1 6</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Latin</td>
<td>1 6</td>
<td>31</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>0 0</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>18 100</td>
<td>490</td>
<td>100</td>
<td>147</td>
<td>100</td>
<td>466</td>
</tr>
<tr>
<td>Publication Date:</td>
<td>1836–53</td>
<td>1854–63</td>
<td>1864–73</td>
<td>1874–83</td>
<td>Unknown</td>
<td>Total</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
</tr>
<tr>
<td>Pre-1700</td>
<td>1 5</td>
<td>8 2</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
<td>9 1</td>
</tr>
<tr>
<td>1700–99</td>
<td>0 0</td>
<td>54 11</td>
<td>0 0</td>
<td>3 1</td>
<td>1 1</td>
<td>58 5</td>
</tr>
<tr>
<td>1800–33</td>
<td>6 33</td>
<td>93 19</td>
<td>5 3</td>
<td>13 3</td>
<td>12 17</td>
<td>129 11</td>
</tr>
<tr>
<td>1834–43</td>
<td>5 28</td>
<td>105 21</td>
<td>0 0</td>
<td>20 4</td>
<td>8 11</td>
<td>138 11</td>
</tr>
<tr>
<td>1844–53</td>
<td>5 28</td>
<td>112 23</td>
<td>9 6</td>
<td>67 14</td>
<td>11 16</td>
<td>204 17</td>
</tr>
<tr>
<td>1854–63</td>
<td>0 0</td>
<td>118 24</td>
<td>20 14</td>
<td>41 9</td>
<td>18 26</td>
<td>197 17</td>
</tr>
<tr>
<td>1864–73</td>
<td>0 0</td>
<td>0 0</td>
<td>112 76</td>
<td>86 18</td>
<td>19 27</td>
<td>217 18</td>
</tr>
<tr>
<td>1874–83</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
<td>233 50</td>
<td>1 1</td>
<td>234 20</td>
</tr>
<tr>
<td>Unknown</td>
<td>1 5</td>
<td>0 0</td>
<td>1 1</td>
<td>3 1</td>
<td>0 0</td>
<td>5 0</td>
</tr>
<tr>
<td>Total</td>
<td>18 99</td>
<td>490 100</td>
<td>147 100</td>
<td>466 100</td>
<td>70 99</td>
<td>1191 100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Format:</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td></td>
</tr>
<tr>
<td>Serial</td>
<td>0 0</td>
<td>38 8</td>
<td>23 16</td>
<td>57 12</td>
<td>6 9</td>
<td>124 10</td>
</tr>
<tr>
<td>Monograph</td>
<td>15 83</td>
<td>277 57</td>
<td>72 49</td>
<td>159 34</td>
<td>40 57</td>
<td>563 47</td>
</tr>
<tr>
<td>Monographic Serial</td>
<td>0 0</td>
<td>98 20</td>
<td>7 5</td>
<td>148 32</td>
<td>1 1</td>
<td>254 21</td>
</tr>
<tr>
<td>Monographs in Parts</td>
<td>1 6</td>
<td>56 11</td>
<td>13 8</td>
<td>4 1</td>
<td>3 4</td>
<td>77 7</td>
</tr>
<tr>
<td>Pamphlet/Reprint</td>
<td>2 11</td>
<td>21 4</td>
<td>32 22</td>
<td>98 21</td>
<td>20 29</td>
<td>173 15</td>
</tr>
<tr>
<td>Total</td>
<td>18 100</td>
<td>490 100</td>
<td>147 100</td>
<td>466 100</td>
<td>70 100</td>
<td>1191 100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deaccessioned</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Titles</td>
<td>7 40</td>
<td>299 61</td>
<td>73 50</td>
<td>266 57</td>
<td>29 41</td>
<td>674 57</td>
</tr>
<tr>
<td>Number of Volumes</td>
<td>28 1</td>
<td>1290 47</td>
<td>388 14</td>
<td>963 35</td>
<td>72 2</td>
<td>2741 100</td>
</tr>
</tbody>
</table>

* Rounding accounts for columns not summing to 100%
Table 11. Collection Accessions: Cumulative Growth, 1836–1883

<table>
<thead>
<tr>
<th>Accession Method:</th>
<th>1836–53</th>
<th>1836–63</th>
<th>1836–73</th>
<th>1836–83</th>
<th>Unknown</th>
<th>1883 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Purchase</td>
<td>0</td>
<td>0</td>
<td>193</td>
<td>38</td>
<td>229</td>
<td>35</td>
</tr>
<tr>
<td>Donation</td>
<td>9</td>
<td>50</td>
<td>163</td>
<td>32</td>
<td>180</td>
<td>27</td>
</tr>
<tr>
<td>Accident</td>
<td>9</td>
<td>50</td>
<td>10</td>
<td>2</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>142</td>
<td>28</td>
<td>235</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100</td>
<td>508</td>
<td>100</td>
<td>655</td>
<td>100</td>
</tr>
<tr>
<td>Purchase Source:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Britain</td>
<td>0</td>
<td>0</td>
<td>97</td>
<td>50</td>
<td>100</td>
<td>44</td>
</tr>
<tr>
<td>Australia</td>
<td>0</td>
<td>0</td>
<td>35</td>
<td>18</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0</td>
<td>0</td>
<td>61</td>
<td>32</td>
<td>61</td>
<td>27</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>33</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>193</td>
<td>100</td>
<td>229</td>
<td>100</td>
</tr>
<tr>
<td>Donation Source:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Britain</td>
<td>0</td>
<td>0</td>
<td>112</td>
<td>68</td>
<td>121</td>
<td>67</td>
</tr>
<tr>
<td>Australia</td>
<td>9</td>
<td>100</td>
<td>40</td>
<td>25</td>
<td>46</td>
<td>26</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Austria</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>India</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>United States</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>France</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>100</td>
<td>163</td>
<td>100</td>
<td>180</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>1836–53</td>
<td></td>
<td>1836–63</td>
<td></td>
<td>1836–73</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>---------</td>
<td>----</td>
<td>---------</td>
<td>----</td>
<td>---------</td>
<td>----</td>
</tr>
<tr>
<td><strong>Source of Purchases and Donations combined:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Britain</td>
<td>0</td>
<td>0</td>
<td>209</td>
<td>59</td>
<td>221</td>
<td>54</td>
</tr>
<tr>
<td>Australia</td>
<td>9</td>
<td>100</td>
<td>75</td>
<td>21</td>
<td>81</td>
<td>20</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0</td>
<td>0</td>
<td>61</td>
<td>17</td>
<td>62</td>
<td>15</td>
</tr>
<tr>
<td>Austria</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>United States</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>France</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9</td>
<td>100</td>
<td>356</td>
<td>100</td>
<td>409</td>
<td>100</td>
</tr>
<tr>
<td><strong>Country of Publication:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>3</td>
<td>17</td>
<td>12</td>
<td>2</td>
<td>48</td>
<td>7</td>
</tr>
<tr>
<td>Britain</td>
<td>3</td>
<td>17</td>
<td>331</td>
<td>65</td>
<td>407</td>
<td>62</td>
</tr>
<tr>
<td>France</td>
<td>4</td>
<td>21</td>
<td>52</td>
<td>10</td>
<td>52</td>
<td>8</td>
</tr>
<tr>
<td>Germany</td>
<td>2</td>
<td>11</td>
<td>32</td>
<td>6</td>
<td>43</td>
<td>7</td>
</tr>
<tr>
<td>Austria</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>1</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
<td>6</td>
<td>9</td>
<td>2</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>NZ</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>3</td>
<td>17</td>
<td>6</td>
<td>1</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>1</td>
<td>6</td>
<td>24</td>
<td>5</td>
<td>34</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>34</td>
<td>7</td>
<td>41</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td>101</td>
<td>508</td>
<td>99</td>
<td>655</td>
<td>100</td>
</tr>
<tr>
<td><strong>Language of Publication:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>9</td>
<td>50</td>
<td>373</td>
<td>73</td>
<td>500</td>
<td>76</td>
</tr>
<tr>
<td>French</td>
<td>4</td>
<td>21</td>
<td>64</td>
<td>13</td>
<td>69</td>
<td>11</td>
</tr>
<tr>
<td>German</td>
<td>3</td>
<td>17</td>
<td>27</td>
<td>5</td>
<td>38</td>
<td>6</td>
</tr>
<tr>
<td>Italian</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Latin</td>
<td>1</td>
<td>6</td>
<td>32</td>
<td>6</td>
<td>34</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td>100</td>
<td>508</td>
<td>100</td>
<td>655</td>
<td>100</td>
</tr>
</tbody>
</table>
### Publication Date:

<table>
<thead>
<tr>
<th></th>
<th>1836–53</th>
<th>1836–63</th>
<th>1836–73</th>
<th>1836–83</th>
<th>Unknown</th>
<th>1883 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Pre-1700</td>
<td>1</td>
<td>5</td>
<td>9</td>
<td>2</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>1700–99</td>
<td>0</td>
<td>0</td>
<td>54</td>
<td>11</td>
<td>54</td>
<td>8</td>
</tr>
<tr>
<td>1800–33</td>
<td>6</td>
<td>33</td>
<td>99</td>
<td>19</td>
<td>104</td>
<td>16</td>
</tr>
<tr>
<td>1834–43</td>
<td>5</td>
<td>28</td>
<td>110</td>
<td>22</td>
<td>110</td>
<td>16</td>
</tr>
<tr>
<td>1844–53</td>
<td>5</td>
<td>28</td>
<td>117</td>
<td>23</td>
<td>126</td>
<td>19</td>
</tr>
<tr>
<td>1854–63</td>
<td>0</td>
<td>0</td>
<td>118</td>
<td>23</td>
<td>138</td>
<td>21</td>
</tr>
<tr>
<td>1864–73</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>112</td>
<td>17</td>
</tr>
<tr>
<td>1874–83</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td>99</td>
<td>508</td>
<td>100</td>
<td>655</td>
<td>99</td>
</tr>
</tbody>
</table>

### Format:

<table>
<thead>
<tr>
<th></th>
<th>1836–53</th>
<th>1836–63</th>
<th>1836–73</th>
<th>1836–83</th>
<th>Unknown</th>
<th>1883 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Serial</td>
<td>0</td>
<td>0</td>
<td>38</td>
<td>8</td>
<td>61</td>
<td>9</td>
</tr>
<tr>
<td>Monograph</td>
<td>15</td>
<td>83</td>
<td>292</td>
<td>57</td>
<td>364</td>
<td>56</td>
</tr>
<tr>
<td>Monographic Series</td>
<td>0</td>
<td>0</td>
<td>98</td>
<td>19</td>
<td>105</td>
<td>16</td>
</tr>
<tr>
<td>Monographs in Parts</td>
<td>1</td>
<td>6</td>
<td>57</td>
<td>11</td>
<td>70</td>
<td>11</td>
</tr>
<tr>
<td>Pamphlet/Reprint</td>
<td>2</td>
<td>11</td>
<td>23</td>
<td>5</td>
<td>55</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td>100</td>
<td>508</td>
<td>100</td>
<td>655</td>
<td>100</td>
</tr>
</tbody>
</table>

### Deaccessioned:

<table>
<thead>
<tr>
<th></th>
<th>1836–53</th>
<th>1836–63</th>
<th>1836–73</th>
<th>1836–83</th>
<th>Unknown</th>
<th>1883 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td><strong>Deaccessioned</strong></td>
<td>4</td>
<td>22</td>
<td>26</td>
<td>5</td>
<td>38</td>
<td>6</td>
</tr>
</tbody>
</table>

### Illustrated Titles:

<table>
<thead>
<tr>
<th></th>
<th>1836–53</th>
<th>1836–63</th>
<th>1836–73</th>
<th>1836–83</th>
<th>Unknown</th>
<th>1883 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td><strong>Illustrated Titles</strong></td>
<td>7</td>
<td>39</td>
<td>306</td>
<td>60</td>
<td>379</td>
<td>58</td>
</tr>
</tbody>
</table>

### Number of Volumes:

<table>
<thead>
<tr>
<th></th>
<th>1836–53</th>
<th>1836–63</th>
<th>1836–73</th>
<th>1836–83</th>
<th>Unknown</th>
<th>1883 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td><strong>Number of Volumes</strong></td>
<td>28</td>
<td>1</td>
<td>1318</td>
<td>48</td>
<td>1706</td>
<td>62</td>
</tr>
<tr>
<td>Subject:</td>
<td>1836–53</td>
<td>1854–63</td>
<td>1864–73</td>
<td>1874–83</td>
<td>Unknown</td>
<td>Total</td>
</tr>
<tr>
<td>------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>A. Zoology</td>
<td>6</td>
<td>33</td>
<td>318</td>
<td>65</td>
<td>68</td>
<td>46</td>
</tr>
<tr>
<td>B. Botany</td>
<td>3</td>
<td>17</td>
<td>24</td>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>C. Geol. etc</td>
<td>0</td>
<td>0</td>
<td>46</td>
<td>9</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>D. Proc. etc</td>
<td>1</td>
<td>6</td>
<td>47</td>
<td>10</td>
<td>32</td>
<td>22</td>
</tr>
<tr>
<td>E. Voyages</td>
<td>2</td>
<td>11</td>
<td>24</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>F. Ency. etc</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>G. Gen. Sc.</td>
<td>4</td>
<td>21</td>
<td>16</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>H. Misc.</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>1</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Unspecified</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100</td>
<td>490</td>
<td>100</td>
<td>147</td>
<td>100</td>
</tr>
</tbody>
</table>

**Subjects in Detail & Redistributed:**

<table>
<thead>
<tr>
<th>Subject:</th>
<th>1836–53</th>
<th>1854–63</th>
<th>1864–73</th>
<th>1874–83</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Zoology</td>
<td>6</td>
<td>33</td>
<td>328</td>
<td>67</td>
<td>82</td>
<td>56</td>
</tr>
<tr>
<td>A1 Mammalia</td>
<td>3</td>
<td>16</td>
<td>24</td>
<td>5</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>A2 Aves</td>
<td>0</td>
<td>0</td>
<td>43</td>
<td>9</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>A3 Rept/Amph</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>3</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>A4 Pisces</td>
<td>1</td>
<td>6</td>
<td>20</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>A5 Mollusca</td>
<td>0</td>
<td>0</td>
<td>40</td>
<td>8</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>A6 Insecta etc.</td>
<td>0</td>
<td>0</td>
<td>111</td>
<td>23</td>
<td>24</td>
<td>17</td>
</tr>
<tr>
<td>A7 Echin. etc</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>3</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>A8 Gen. Zool.</td>
<td>1</td>
<td>6</td>
<td>38</td>
<td>7</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>A9 Comp. Anat</td>
<td>1</td>
<td>6</td>
<td>21</td>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>B. Botany</td>
<td>3</td>
<td>17</td>
<td>24</td>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>C. Geol. etc</td>
<td>0</td>
<td>0</td>
<td>54</td>
<td>11</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>D. Proc. etc</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E. Voyages</td>
<td>2</td>
<td>11</td>
<td>24</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>F. Ency. etc</td>
<td>1</td>
<td>6</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>G. Gen. Sc.</td>
<td>5</td>
<td>28</td>
<td>34</td>
<td>7</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>H. Misc.</td>
<td>1</td>
<td>6</td>
<td>18</td>
<td>4</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Unspecified</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>101</td>
<td>490</td>
<td>100</td>
<td>147</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 13. Collection Accessions by Subject: Cumulative Growth, 1836–1883

<table>
<thead>
<tr>
<th>Subject</th>
<th>1836–53</th>
<th>1836–63</th>
<th>1836–73</th>
<th>1836–83</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>A. Zoology</td>
<td>6</td>
<td>33</td>
<td>324</td>
<td>63</td>
<td>392</td>
<td>59</td>
</tr>
<tr>
<td>B. Botany</td>
<td>3</td>
<td>17</td>
<td>27</td>
<td>5</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>C. Geol. etc</td>
<td>0</td>
<td>0</td>
<td>46</td>
<td>9</td>
<td>63</td>
<td>10</td>
</tr>
<tr>
<td>D. Proc. etc</td>
<td>1</td>
<td>6</td>
<td>48</td>
<td>9</td>
<td>80</td>
<td>12</td>
</tr>
<tr>
<td>E. Voyages</td>
<td>2</td>
<td>11</td>
<td>26</td>
<td>5</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>F. Ency. etc</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>2</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>G. Gen. Sc.</td>
<td>4</td>
<td>21</td>
<td>20</td>
<td>4</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>H. Misc.</td>
<td>1</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>Unspecified</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100</td>
<td>508</td>
<td>99</td>
<td>655</td>
<td>100</td>
</tr>
</tbody>
</table>

Subjects in Detail & Redistributed:

<table>
<thead>
<tr>
<th>Subject</th>
<th>1836–53</th>
<th>1836–63</th>
<th>1836–73</th>
<th>1836–83</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>A. Zoology</td>
<td>6</td>
<td>33</td>
<td>334</td>
<td>66</td>
<td>416</td>
<td>64</td>
</tr>
<tr>
<td>A1 Mammalia</td>
<td>3</td>
<td>16</td>
<td>27</td>
<td>5</td>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>A2 Aves</td>
<td>0</td>
<td>0</td>
<td>43</td>
<td>9</td>
<td>55</td>
<td>8</td>
</tr>
<tr>
<td>A3 Rept/Amph</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>3</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>A4 Pisces</td>
<td>1</td>
<td>6</td>
<td>21</td>
<td>4</td>
<td>23</td>
<td>4</td>
</tr>
<tr>
<td>A5 Mollusca</td>
<td>0</td>
<td>0</td>
<td>40</td>
<td>8</td>
<td>43</td>
<td>7</td>
</tr>
<tr>
<td>A6 Insecta etc</td>
<td>0</td>
<td>0</td>
<td>111</td>
<td>22</td>
<td>135</td>
<td>21</td>
</tr>
<tr>
<td>A7 Echin. etc</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>3</td>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td>A8 Gen. Zool.</td>
<td>1</td>
<td>6</td>
<td>39</td>
<td>8</td>
<td>45</td>
<td>6</td>
</tr>
<tr>
<td>A9 Comp. Anat</td>
<td>1</td>
<td>6</td>
<td>22</td>
<td>4</td>
<td>28</td>
<td>5</td>
</tr>
<tr>
<td>B. Botany</td>
<td>3</td>
<td>17</td>
<td>27</td>
<td>5</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>C. Geol. etc</td>
<td>0</td>
<td>0</td>
<td>54</td>
<td>10</td>
<td>78</td>
<td>12</td>
</tr>
<tr>
<td>D. Proc. etc</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E. Voyages</td>
<td>2</td>
<td>11</td>
<td>26</td>
<td>5</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>F. Ency. etc</td>
<td>1</td>
<td>6</td>
<td>9</td>
<td>2</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>G. Gen. Sc.</td>
<td>5</td>
<td>28</td>
<td>39</td>
<td>8</td>
<td>54</td>
<td>9</td>
</tr>
<tr>
<td>H. Misc.</td>
<td>1</td>
<td>6</td>
<td>19</td>
<td>4</td>
<td>34</td>
<td>4</td>
</tr>
<tr>
<td>Unspecified</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>101</td>
<td>508</td>
<td>100</td>
<td>655</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 14. First Endowment: Periodised Comparison, 1854–1863

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Purchase</td>
<td>74</td>
<td>38</td>
<td>107</td>
<td>41</td>
</tr>
<tr>
<td>Donation</td>
<td>106</td>
<td>55</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>Accident</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>13</td>
<td>7</td>
<td>124</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100</td>
<td>258</td>
<td>100</td>
</tr>
</tbody>
</table>

| Purchase Source: |
|------------------|-----------------|-----------------|-----------------|-----------------|
|                  | Britain | 0   | 88  | 82  | 9   | 75  | 97  | 50  |
|                  | Australia | 13  | 18  | 19  | 18  | 3   | 25  | 35  | 18  |
|                  | New Zealand | 61  | 82  | 0   | 0   | 0   | 0   | 61  | 32  |
| Total            | 74      | 100 | 107 | 100 | 12  | 100 | 193 | 100 |

| Donation Source: |
|------------------|-----------------|-----------------|-----------------|-----------------|
|                  | Britain | 79  | 74  | 19  | 73  | 14  | 64  | 112 | 73  |
|                  | Australia | 20  | 19  | 3   | 11  | 8   | 36  | 31  | 20  |
|                  | Austria | 4   | 4   | 0   | 0   | 0   | 0   | 4   | 3   |
|                  | Netherlands | 0   | 0   | 2   | 8   | 0   | 0   | 2   | 1   |
|                  | Unknown | 3   | 3   | 2   | 8   | 0   | 0   | 5   | 3   |
| Total            | 106     | 100 | 26  | 100 | 22  | 100 | 154 | 100 |

| Source of Purchases and Donations combined: |
|------------------|-----------------|-----------------|-----------------|-----------------|
|                  | Britain | 79  | 44  | 107 | 80  | 23  | 68  | 209 | 62  |
|                  | Australia | 33  | 18  | 22  | 16  | 11  | 32  | 66  | 19  |
|                  | New Zealand | 61  | 34  | 0   | 0   | 0   | 0   | 61  | 18  |
|                  | Austria | 4   | 2   | 0   | 0   | 0   | 0   | 4   | 1   |
|                  | Netherlands | 0   | 0   | 2   | 2   | 0   | 0   | 2   | 0   |
|                  | Unknown | 3   | 2   | 2   | 2   | 0   | 0   | 5   | 1   |
| Total            | 180     | 100 | 133 | 100 | 34  | 100 | 347 | 101 |

| Country of Publication: |
|------------------|-----------------|-----------------|-----------------|-----------------|
|                  | Australia/NZ | 4   | 2   | 2   | 1   | 4   | 10  | 10  | 2   |
|                  | Britain     | 125 | 65  | 176 | 68  | 27  | 69  | 328 | 67  |
|                  | France      | 21  | 11  | 25  | 10  | 2   | 5   | 48  | 8   |
|                  | Germany     | 12  | 6   | 15  | 6   | 3   | 8   | 30  | 6   |
|                  | Austria     | 5   | 3   | 1   | 0   | 0   | 0   | 6   | 1   |
|                  | Italy       | 8   | 4   | 0   | 0   | 0   | 0   | 8   | 2   |
|                  | Other Europe | 13  | 7   | 19  | 7   | 0   | 0   | 32  | 7   |
|                  | India       | 2   | 1   | 0   | 0   | 1   | 3   | 3   | 1   |
|                  | U.S.A.      | 2   | 1   | 19  | 7   | 2   | 5   | 23  | 5   |
|                  | Other       | 1   | 0   | 1   | 0   | 0   | 0   | 2   | 0   |
| Total            | 193     | 100 | 258 | 99  | 39  | 100 | 490 | 99  |
|-------------------------|-----------------------|---------|-----------------------|--------------|
| No. | % | No. | % | No. | % | No. | % |
| English | 133 | 69 | 197 | 76 | 34 | 87 | 364 | 74 |
| French | 24 | 12 | 34 | 13 | 2 | 5 | 60 | 12 |
| German | 9 | 5 | 12 | 5 | 3 | 8 | 24 | 5 |
| Italian | 4 | 2 | 0 | 0 | 0 | 0 | 4 | 1 |
| Latin | 22 | 11 | 9 | 4 | 0 | 0 | 31 | 6 |
| Other | 1 | 1 | 6 | 2 | 0 | 0 | 7 | 2 |
| Total | 193 | 100 | 258 | 100 | 39 | 100 | 490 | 100 |

<table>
<thead>
<tr>
<th>Publication Date:</th>
<th>Pre-Endowment 1854–59</th>
<th>1860–61</th>
<th>Post-Endowment 1862–63</th>
<th>Total 1854–63</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Pre-1700</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>1700–99</td>
<td>34</td>
<td>18</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>1800–33</td>
<td>39</td>
<td>20</td>
<td>54</td>
<td>21</td>
</tr>
<tr>
<td>1834–43</td>
<td>10</td>
<td>5</td>
<td>92</td>
<td>36</td>
</tr>
<tr>
<td>1844–53</td>
<td>65</td>
<td>34</td>
<td>44</td>
<td>17</td>
</tr>
<tr>
<td>1854–63</td>
<td>41</td>
<td>21</td>
<td>48</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100</td>
<td>258</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Serial</td>
<td>14</td>
<td>7</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>Monograph</td>
<td>109</td>
<td>57</td>
<td>145</td>
<td>56</td>
</tr>
<tr>
<td>Mono. Ser.</td>
<td>17</td>
<td>9</td>
<td>78</td>
<td>30</td>
</tr>
<tr>
<td>Mono. Part</td>
<td>39</td>
<td>20</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Pamp./Rep.</td>
<td>14</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100</td>
<td>258</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>14</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>86</td>
<td>45</td>
<td>196</td>
<td>76</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>405</td>
<td>31</td>
<td>810</td>
<td>63</td>
<td>75</td>
</tr>
</tbody>
</table>
### Table 15. First Endowment by Subject: Periodised Comparison, 1854–1863

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>A. Zoology</td>
<td>128</td>
<td>66</td>
<td>162</td>
<td>63</td>
</tr>
<tr>
<td>B. Botany</td>
<td>13</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>C. Geol. etc</td>
<td>18</td>
<td>9</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>D. Proc. etc</td>
<td>19</td>
<td>10</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>E. Voyages</td>
<td>4</td>
<td>2</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>F. Ency. etc</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>G. Gen. Sc.</td>
<td>5</td>
<td>3</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>H. Misc.</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100</td>
<td>258</td>
<td>100</td>
</tr>
</tbody>
</table>

#### Subjects in Detail & Redistributed:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>A. Zoology</td>
<td>130</td>
<td>67</td>
<td>170</td>
<td>66</td>
</tr>
<tr>
<td>A1 Mammalia</td>
<td>4</td>
<td>2</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>A2 Aves</td>
<td>15</td>
<td>8</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>A3 Rept/Amph</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>A4 Pisces</td>
<td>9</td>
<td>4</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>A5 Mollusca</td>
<td>19</td>
<td>10</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>A6 Insecta etc.</td>
<td>55</td>
<td>28</td>
<td>42</td>
<td>17</td>
</tr>
<tr>
<td>A7 Echin. etc</td>
<td>7</td>
<td>4</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>A8 Gen. Zoology</td>
<td>12</td>
<td>6</td>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>A9 Comp. Anatomy</td>
<td>2</td>
<td>1</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>B. Botany</td>
<td>13</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>C. Geol. etc</td>
<td>23</td>
<td>12</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>D. Proc. etc</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E. Voyages</td>
<td>4</td>
<td>2</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>F. Ency. etc</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>G. Gen. Sc.</td>
<td>10</td>
<td>5</td>
<td>22</td>
<td>8</td>
</tr>
<tr>
<td>H. Misc.</td>
<td>11</td>
<td>6</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100</td>
<td>258</td>
<td>100</td>
</tr>
</tbody>
</table>
Appendix J: Sinclair’s Rules for the AML, 1886.

Rules for the Library

It was resolved that the following rules be adopted.

1. Every Trustee shall be entitled to take from the Library for a period not exceeding fourteen days four volumes at a time.

2. Every person having obtained a loan of books from the Curator or Secretary shall write their names and his own on a card provided for the purpose, to be left on the shelf in place of the books removed; and if they are to be taken out of the Museum he shall also write the names in the Register, with his signature attached, and the date of removal. Books must be returned to the Library at the expiration of fourteen days, but may be reissued.

3. Visitors will not be permitted to take books out of the Library, but may be allowed to consult them in the Board room.

4. No person shall remove any book from the shelves in the Library unless with the sanction and in the presence of the Curator or Secretary.

5. Books returned to the Library must not be replaced on the shelves by the borrower, but must be left on the table for the inspection of the Curator or Secretary, and placed on the shelves only by one of those officers.

6. The Curator and Secretary are authorised to make such regulations as may be necessary for the proper carrying out of the above rules.

[AMS1 Trustee Minutes, 20 April 1886]
Appendix K: AML Library Staff, 1880–1920

Permanent staff associated with AML in order of appointment year:

- Sutherland Sinclair (1882–1917)
  - Secretary, and added term ‘Librarian’ in 1892
- W.H. Hill (1885–95)
  - Clerk
- Frank T. Clark (1896–1904?)
  - Clerk [worked in this position until 1916 but it is likely that library duties were transferred to Rainbow c1904]
- W.A. Rainbow (1903–1951) [17 years old]
  - Mechanical Assistant (1903), Assistant Librarian (1906), Librarian (1917)
- Roy Kinghorn (1907)
  - Museum Cadet. [Later Curator, Ornithology and Assistant Director.]
- Marcel Aurousseau (1908–09)
  - Museum Cadet. [Studied geology and chemistry, later worked as a geographer and geologist and edited the letters of Ludwig Leichhardt for the Hakluyt Society.]
- Anthony Musgrave (1910)
  - Museum Cadet. [Later became AM Entomologist.]
- Wilfred Vaughan (1913–14)
  - Library Clerk
- F.A. McNeill (1914)
  - Library Clerk. [Later became Curator, Lower Invertebrates.]
  - Library Clerk. [Dismissed for stealing money]
- C.C.R. Anderson (1916–1917)
  - Library Clerk
- W. Cleary (1917–1919)
  - Library Clerk
- V. Reynolds (1919–1920)
- Library Clerk
  - F.D. McCarthy (1920–1930)
    - Library Clerk. [Later became Curator, Anthropology.]

Temporary Appointments:

- Mr Powell (1880)
  - Employed for 3 months to catalogue the books in the Museum Library. There are no details about his qualifications or the work he performed. [AMS1 Trustee Minutes, 5 October 1880 and 4 January 1881.]

- Thomas H. Fielding (1883)
  - Employed to arrange library and prepare catalogue for printing. Fielding was a referral from R.C.Walker, Principal Librarian of the Free Public Library. [AMS24, Curator’s Report no. 18, 10 June 1883.]

- S.H. Bowden (1892)
  - No experience in cataloguing, but employed to assist Sinclair in the library while preparing the catalogue for publication. [AMS25/1 General Report no. 6, 5 July 1892.]

- Man or lad to temporarily dust books and shelf-check (1895)
  [AMS25/2 General Report no. 2, 7 May 1895.]
Illustration Acknowledgements

p. 38 George Bennett, 1840s, National Library of Australia, an9455386.


p. 47 Alexander Macleay, Courtesy Australian Museum Archives, MA184.

p. 135 ‘List of Books, the Property of the Late Dr. Leichhardt, in the Museum Library’, Papers relating to the Leichhardt Collection of books at one time in the Museum and now in the Public Library of New South Wales, Mitchell Library, State Library of New South Wales, A3938.


p. 178–180 Examples c to f, photographs supplied by the Australian Museum.


p. 213 Photograph supplied by the Australian Museum.


p. 243 A recreation of Alexander Maleay’s library at Elizabeth Bay House, 1839 to 1845, Historic Houses Trust, photograph by Ray Joyce.
p. 243 The library at Elizabeth Bay House c 1935. Photograph by Thomas Lawlor, Caroline Simpson Library & Research Collection, Historic Houses Trust of NSW, record no. 32614.

p. 245 The boardroom, 1924, Courtesy Australian Museum Archives. AMS351/V3934.


p. 285 Classification scheme used in the AML’s 1883 catalogue, author’s collection.


p. 345 The AML when temporarily located in a corrugated iron shed in the grounds of the Museum, 1890-92, Mitchell Library, State Library of NSW, PXA 1022/5.

p. 351 Plans for Museum extension with new library, 1911, Courtesy Australian Museum Archives, AMS155/P5.

p. 353 Interior of the AML, c.1918, Courtesy Australian Museum Archives AMS514/VA163/1.